PIBS #4055e

Air Quality in Ontario 1998
Appendix

ONTARIO

Ministry of the
Environment

TABLE OF CONTENTS

PAGE NO.

INTRODUCTION i

MONITORING NETWORK OPERATIONS i
NETWORK DESCRIPTIVE TABLES AND ANNUAL STATISTICS iii

TABLE 1	Ontario Continuous Air Monitoring Network for 1998	1
TABLE 2	Ontario Non Continuous Air Monitoring Network for 1998	3
TABLE 3	Ontario Air Monitoring Network for PM_{10} 24-Hour Sampling for 1998	5
TABLE 4	Ontario Meteorological Network for 1998	6
TABLE 5	Sulphur Dioxide (SO_2) Statistics (1998)	7
TABLE 6	Suspended Particles (SP) Statistics (1998)	9
TABLE 7	Total Reduced Sulphur (TRS) Statistics (1998)	10
TABLE 8	Carbon Monoxide (CO) Statistics (1998)	11
TABLE 9	Nitrogen Dioxide (NO_2) Statistics (1998)	12
TABLE 10	Nitric Oxide (NO) Statistics (1998)	13
TABLE 11	Total Nitrogen Oxides (NO_x) Statistics (1998)	14
TABLE 12	Ozone (O_3) Statistics (1998)	15
TABLE 13	Inhalable Particles (PM_{10}) Statistics (1998)	17
TABLE 14	Respirable Particles ($PM_{2.5}$) Statistics (1998)	18
TABLE 15	Total Suspended Particulate (TSP) Statistics (1998)	19
TABLE 16	Lead (Pb) in TSP Statistics (1998)	21
TABLE 17	Iron (Fe) in TSP Statistics (1998)	22
TABLE 18	Manganese (Mn) in TSP Statistics (1998)	23
TABLE 19	Nickel (Ni) in TSP Statistics (1998)	24
TABLE 20	Chromium (Cr) in TSP Statistics (1998)	25
TABLE 21	Vanadium (V) in TSP Statistics (1998)	26
TABLE 22	Copper (Cu) in TSP Statistics (1998)	27
TABLE 23	Nitrate (NO_3^-) in TSP Statistics (1998)	28
TABLE 24	Sulphate (SO_4^{2-}) in TSP Statistics (1998)	29
TABLE 25	Inhalable Particles (PM_{10}) 24-Hour Statistics (1998)	30
TABLE 26	Copper (Cu) in PM_{10} Statistics (1998)	31
TABLE 27	Iron (Fe) in PM_{10} Statistics (1998)	32
TABLE 28	Manganese (Mn) in PM_{10} Statistics (1998)	33
TABLE 29	Sulphate (SO_4^{2-}) in PM_{10} Statistics (1998)	34
TABLE 30	10-Year Trend for SO_2	35
TABLE 31	10-Year Trend for SP (as measured by COH)	36
TABLE 32	10-Year Trend for TRS	37
TABLE 33	10-Year Trend for CO	38
TABLE 34	10-Year Trend for NO_2	39

TABLE OF CONTENTS (Con't) **PAGE NO.**

TABLE 35	10-Year Trend for NO	40
TABLE 36	10-Year Trend for NO_x	41
TABLE 37	10-Year Trend for O_3	42
TABLE 38	Stations Used in Gaseous Trends	43
MAP 1	Location of Provincial Regional Boundaries (1998)	44
MAP 2	Location of Provincial Continuous SO_2 Air Monitoring Stations (1998)	45
MAP 3	Location of Provincial Continuous SP(as COH) Air Monitoring Stations (1998)	46
MAP 4	Location of Provincial Continuous TRS Air Monitoring Stations (1998)	47
MAP 5	Location of Provincial Continuous CO Air Monitoring Stations (1998)	48
MAP 6	Location of Provincial Continuous NO_2 Air Monitoring Stations (1998)	49
MAP 7	Location of Provincial Continuous O_3 Air Monitoring Stations (1998)	50
MAP 8	Location of Provincial Continuous $PM_{10/2.5}$ Air Monitoring Stations (1998)	51
MAP 9	Location of Provincial Continuous AQI Air Monitoring Stations (1998)	52
MAP 10	Location of Provincial 24-Hour TSP Air Monitoring Stations (1998)	53
MAP 11	Location of Provincial 24-Hour PM_{10} Air Monitoring Stations (1998)	54
MAP 12	Location of Provincial Continuous MET Air Monitoring Stations (1998)	55

INTRODUCTION

This appendix is intended for use in conjunction with the annual report Air Quality in Ontario 1998. The first part of the Appendix briefly describes the provincial air monitoring network, the quality assurance and quality control procedures and data base. The second part of the Appendix provides a series of tables showing the station locations as well as a listing of the summary statistics including, means, maxima, percentile values and the number of exceedances of the Ontario criteria for each pollutant.

MONITORING NETWORK OPERATIONS

Network Description

In 1971, the provincial air monitoring network consisted of 254 instruments: 166 continuous analyzers at 76 monitoring sites and 88 sites with high-volume samplers. By 1980, the provincial network had reached its maximum size at 450 instruments of which 268 were continuous analyzers at 106 sites and 182 high-volume samplers. During 1998, the network consisted of 225 continuous monitoring instruments at 72 sites, 56 high-volume samplers, 26 daily PM_{10} samplers and 24 real-time $PM_{10/2.5}$ monitors.

Ministry regional boundaries along with the Regional, area and district head office locations are show in Map 1.

More than 60% of all air monitoring by the ministry is source-specific and is the principal responsibility of Operations Division. For the most part, the operation of the monitoring stations and the collection of air samples is conducted by the regional staff. Environmental Monitoring and Reporting Branch operates the Greater Toronto Area (ambient stations) network and the mobile air monitoring units. The monitoring networks are classified by their functions: continuous air monitoring stations; non-continuous sampling sites; the toxic networks; and mobile air monitoring.

Quality Assurance and Quality Control

In 1998, each region had an atmospheric and terrestrial effects unit responsible for the day-to-day air monitoring and maintenance.

Each day, the instruments are checked through a computerized telephone link by technicians confirming the automatic zero and span values (that is, a known value for a particular gas).

Regional technicians inspect and maintain the monitoring equipment and stations continually. If an instrument undergoes major servicing, the instrumentation and quality assurance unit will re-calibrate it.

Portable calibration equipment is used by regional staff. This equipment itself is re-calibrated at least twice per year.

There are other monitoring programs, such as those operated by the Lambton Industrial Society, Environment Canada and Ontario Hydro, which the ministry either audits or conducts comparisons with. It uses data from these services to judge provincial air quality.

The environmental monitoring and reporting branch operates a laboratory with gas reference standards that adhere to those of the U.S. National Institute of Standards and Technology (NIST) as well as to the pollution measurement division of Environment Canada.

Performance audits are conducted on the sulphur dioxide, nitrogen oxides/nitrogen dioxide, ozone and total reduced sulphur (as hydrogen sulphide) monitors approximately three times per year and on carbon monoxide monitors once per year.

Chemical analyses performed by the laboratory services branch are also subject to quality assurance and control.

The ambient air quality monitoring network undergoes constant maintenance to ensure a high standard of quality control.

Continuous real-time and particulate data are reviewed, assessed and validated constantly by regional staff and staff of the Environmental Monitoring and Reporting Branch.

Actions are taken immediately to correct anything that may affect the validity of the data.

These measures ensure that ambient air monitoring data are valid, complete, comparable, representative and accurate.

In 1998, continuous air monitoring instruments were given 676 performance audits. Approximately 80.9 per cent of the audits were found to be in the acceptable performance criterion , i.e. measured values were within 10 per cent of the standard For the remaining 19.1 per cent which fell outside the 10 per cent range, station log records and backup charts were consulted to adjust the data to reflect true ambient concentrations. As a result, the network for 1998 had 93.0 per cent valid data out of approximately 4 million data points.

Data Base

The ambient air quality data used in this report are stored in the ministry's air quality information system (AQUIS). Approximately 4 million air pollution measurements are added to AQUIS yearly, with the vast majority representing Ontario's more heavily populated urban areas.

A statistical pattern test is used to identify data anomalies, such as unusual pollutant concentrations. Each pollutant has a predetermined pollutant concentration range based on historical data. Values outside this range are flagged for further investigation.

AQUIS data are divided into two major groupings: continuous (1-hour) measurements and daily (24-hour) measurements.

Hourly data are obtained from automated ambient air monitoring instruments which operate continuously. These produce an average measurement each hour for a possible total of 8760 measurements in a year.

SO_2, SP (as COH), CO, $NO_x/NO/NO_2$, O_3, $PM_{10}/PM_{2.5}$ and TRS compounds are all measured hourly. A valid annual mean requires at least 5840 hourly readings or 67 per cent valid data. Typically the network yields approximately 95 per cent valid data.

The instruments which provide daily measurements from a 24-hour sampling period are usually operated on one, three or six-day sampling cycles. They measure TSP, PM_{10}, lead, various trace metals, sulphate and nitrate.

For daily data, a valid annual mean requires at least two thirds of the total number of possible samples, i.e., a station operating on a 6-day sampling schedule would require at least 40 out of a possible 61 samples.

To be included in the 10-year trend analysis, a site must have valid annual means for at least 8 out of the 10 years 1989-1998. To be included in long term analysis a site must have a valid annual for at least 22 out of the 27-years, 1971-1998.

NETWORK DESCRIPTIVE TABLES AND ANNUAL STATISTICS

The entire continuous (hourly) network is summarized in Table 1 and Maps 2-9. The table gives station name, numerical identifier, and pollutants measured. The numerical identifier is the station (ID) number, the first digit of which identifies the geographic region in which the station is located.

The column headings for the continuous pollutants are as follows:

SO_2	(sulphur dioxide)
SP	(suspended particles as measured by COH)
TRS	(total reduced sulphur compounds)
CO	(carbon monoxide)
NO_2	(nitrogen dioxide)
NO_x	(oxides of nitrogen)
NO	(nitric oxide)
O_3	(ozone)
$PM_{10}/PM_{2.5}$	(real-time inhalable/respirable particles)
API	(air pollution index)
AQI	(air quality index)

The particulate (daily) network is summarized in Table 2 and Map 10. The table gives station name, numerical identifier, and pollutants measured. Numerals indicate the monitoring cycle frequency in days. Some additional codes are defined in the key at the top of the table. The column headings for the noncontinuous pollutants are as follows:

TSP	(total suspended particles)
Cu	(copper in TSP)
Cr	(chromium in TSP)
Fe	(iron in TSP)
Mn	(manganese in TSP)
Ni	(nickel in TSP)
Pb	(lead in TSP)
V	(vanadium in TSP)
NO_3^-	(nitrate in TSP)
SO_4^{2-}	(sulphate in TSP)

The inhalable particle (PM_{-10}) network is summarized in Table 3 and Map 11. This table gives the station location, parameters measured and frequency of sampling.

The meteorological network is summarized in Table 4 and Map 12. This table gives station name, numerical identifier, meteorological parameters measured and the height of the measurements.

The 1998 statistical data for the various pollutants are provided in Tables 5 through 29. The 10-year trends are presented in Tables 30 to 37. The stations used in the 10-year trends are listed in Table 38.

ABBREVIATIONS

ID	- five digit provincial station identification number
TYP	- survey type
YR	- year monitoring began
LAT	- station latitude in degrees/minutes
LONG	- station longitude in degrees/minutes
ELEV	- elevation of sampling inlet (metres above ground)
INS	- insufficient data to compute relevant statistics

TABLE 1 ONTARIO CONTINUOUS AIR MONITORING NETWORK FOR 1998

T = FULL YEAR DATA t = PARTIAL YEAR DATA
TYP = A AMBIENT SURVEY; I SOURCE SPECIFIC SURVEY

ID = STATION IDENTIFICATION NUMBER
LAT = LATITUDE(DEGREES:MINUTES)

ELEV = AIR INTAKE HEIGHT ABOVE GROUND
LON = LONGITUDE(DEGREES:MINUTES)

CITY	STATION NAME	ID	TYP	YR	LAT	LON	ELEV (M)	S02	COH	CO	O3	NO2/NOX NO	PM10	PM2.5	TRS	API	AQI
WINDSOR	WRIGHT/WATER ST	12007	A	84	42:17	83:06	4	T							T		
WINDSOR	467 UNIVERSITY AV W	12008	A	69	42:19	83:03	8	T	T	T	T	T				T	T
WINDSOR	TECUMSEH WATER TREATMENT PLT	12009	I	98	42:20	82:55	4	t				t					
WINDSOR	COLLEGE/SOUTH ST	12016	A	75	42:18	83:04	4	T	T		T		T		T	T	T
MERLIN	MOE WATER PUMP STN, MIDDLE RD	13021	A	77	42:15	82:13	4				T						
COURTRIGHT	HWY40 (OPP LAMBTON GS)	14016	I	69	42:48	82:29	4	T									
SARNIA	CENTENNIAL PK,FRONT ST/CN TRACKS	14064	A	76	42:59	82:24	3	T	T	T	T	T	T		T	T	T
MANDAUMIN	CONCESSION RD 26	14118	A	77	42:56	82:14	4				T						
LONGWOODS	LONGWOODS CONSERVATION AUTH	15009	A	83	42:53	81:29	4				T						
PARKHILL	PUC BUILDING	15013	A	83	43:10	81:41	5				T	T					
GRAND BEND	POINT BLAKE (CONSERVATION AREA)	15020	A	91	43:20	81:44	4				T						
LONDON	900 HIGHBURY AVE.	15025	A	95	42:61	81:13	4	T	T	T	T	T	T			T	T
TIVERTON	CONCESSION RD 2 LOT A	18007	A	79	44:18	81:35	4				T			T			
SIMCOE	EXPERIMENTAL FARM	22071	A	75	42:51	80:16	4	T			T	T		T			
NANTICOKE	CHEAPSIDE RD(3 KM S OF HWY 3)	22086	I	77	42:52	80:00	5	T				T					
LONG POINT	PROVINCIAL PARK	22901	A	79	42:35	80:23	4	T			T	T					
NANTICOKE	WALPOLE S PS, SANDUSK RD	22904	I	79	42:50	80:02	4	T							T		
NANTICOKE	NANTICOKE VILLAGE	22907	I	84	42:49	80:05	4	T	T						T		
KITCHENER	WEST AVE/HOMEWOOD	26060	A	90	43:26	80:30	5	T	T	T	T	T		T		T	T
ST CATHARINES	ARGYLE CRESCENT	27067	A	87	43:10	79:14	4	T	T	T	T	T		T		T	T
HAMILTON	ELGIN/KELLY	29000	A	87	43:15	79:52	4	T	T	T	T	T		T	T	T	T
HAMILTON	BARTON/SANFORD	29025	I	69	43:16	79:51	4	T	T				T		T		
HAMILTON	467 BEACH BLVD	29102	I	84	43:17	79:47	4	T	T			T			T		
HAMILTON	VICKERS RD/EAST 8TH ST	29114	A	85	43:14	79:52	3	T	T		T	T		T	T	T	T
HAMILTON	MAIN ST/W HWY 403	29118	A	85	43:15	79:54	3	T	T	T	T	T			T	T	T
HAMILTON	HILLYARD ST	29531	I	96	43:29	79:55	3		T				T		T		
HAMILTON	PIER 25/BEACH STRIP	29547	I	92	43:27	79:78	4		T				t		T		
HAMILTON	HOMESIDE	29561	I	95	43:21	79:66	4		T				t				
TORONTO	CN TOWER	31190	A	89	43:35	79:23	444				t	t					
TORONTO	BAY/WELLESLEY	31103	A	97	43:39	79:23	3	T	t	T	T	T		T			T
SCARBOROUGH	LAWRENCE/KENNEDY	33003	A	70	43:45	79:16	4	T	t	T	T	T	T				T
NORTH YORK	HENDON AVE (YONGE ST/FINCH AVE)	34020	A	88	43:47	79:25	5	T	t	T	T	T		T			T
ETOBICOKE	ELMCREST RD (CENTENNIAL PK)	35003	A	69	43:39	79:35	5	T	t	T	T	T	T				T
ETOBICOKE	EVANS/ARNOLD AV.	35033	A	67	43:37	79:31	5	T	T	T	T	T		T		T	T
YORK	CLEARVIEW HEIGHTS	36030	I	88	43:42	79:29	5	T	T	T	T	T				T	T
BURLINGTON	HWY2/NORTH SHORE BLVD E	44008	A	79	43:19	79:48	5	T	T	T	T	T				T	T
OAKVILLE	BRONTE RD/WOBURN CRES.	44015	A	80	43:24	79:44	5	T	T	T	T	T			T	T	T
OSHAWA	PS, RITSON RD/OLIVE AV	45025	A	79	43:53	78:51	5	T	t	T	T	T		T			T
MISSISSAUGA	QUEENSWAY W/HURONTARIO ST.	46110	A	77	43:34	79:37	5	T	T	T	T			T		T	T
MISSISSAUGA	MEADOW PK, APPLE LANE C C	46117	I	87	43:31	79:36	5	T							T		
STOUFFVILLE	HWY47/E OF HWY48	48002	A	74	43:58	79:16	5				T	T	T				
DORSET	HWY 117/PAINT LAKE ROAD	49010	A	81	45:13	78:56	3	t			T	t					
OTTAWA	MCD GDS, RIDEAU/WURTENBURG ST.	51001	A	71	45:26	75:41	4	T	T	T	T	T		T		T	T
KINGSTON	DALTON STREET	52020	A	88	44:14	76:31	5		T		T		T				T
CORNWALL	MEMORIAL PK, BEDFORD/THIRD STS.	56051	I	70	45:01	74:44	4	T	T	T	T				T	T	T
PETERBOROUGH	10 HOSPITAL DRIVE	59006	A	98	44:18	78:21	7	t		t	t	t					
DRYDEN	35 VAN HORNE AV.	61027	I	84	49:47	92:50	15								T		
FORT FRANCES	PORTAGE/CHURCH ST.	62030	I	76	48:37	93:24	4								T		
FORT FRANCES	CEMETERY,COLONIZATION RD W	62032	I	76	48:37	93:25	5								T		
FORT FRANCES	EIGHTH ST/CORNWALL AVE.	62047	I	90	48:37	93:24	4								T		

TABLE 1 ONTARIO CONTINUOUS AIR MONITORING NETWORK FOR 1998

T = FULL YEAR DATA t = PARTIAL YEAR DATA
TYP = A AMBIENT SURVEY, I SOURCE SPECIFIC SURVEY

ID = STATION IDENTIFICATION NUMBER
LAT = LATITUDE(DEGREES MINUTES)

ELEV = AIR INTAKE HEIGHT ABOVE GROUND
LON = LONGITUDE(DEGREES.MINUTES)

CITY	STATION NAME	ID	TYP	YR	LAT	LON	ELEV (M)	S02	COH	CO	O3	NO2/NOX NO	PM10	PM2.5	TRS	API	AQI
FORT FRANCES	ROBERT MOORE P S ARMIT AV/4TH ST	62200	I	97	48 38	9323	3		T		T				T		T
MARATHON	PETER STREET	63033	I	91	48 43	86 23	4								T		
THUNDER BAY	BOMBARDIER, MONTREAL ST	63046	I	76	48 21	89 18	3								T		
RED ROCK	RECREATION CTR, BROMPTON RD	63084	I	81	48 57	88 15	7								T		
TERRACE BAY	ST MARTIN SCHOOL, SELKIRK ST	63090	I	81	48 47	87 06	8								T		
TERRACE BAY	TERRACE HEIGHT DR	63092	I	94	48 48	87 04	4								T		
THUNDER BAY	MOT 615 JAMES ST S	63200	A	86	48 23	89 17	3	T	T	T	T	T			T	T	T
SAULT STE MARIE	WM MERRIFIELD SCHOOL, PATRICT ST	71068	A	87	46 32	84 21	3	T	T		T	T	T		T	T	T
NORTH BAY	DEPT NATIONAL DEFENCE, CHIPPEWA ST	75010	A	79	46 19	79 27	4		T		T						T
SUDBURY	SKEAD	77012	I	52	46 39	80 46	4	T									
SUDBURY	HANMER	77013	I	73	46 39	80 57	5	T									
SUDBURY	WATER TANK ASH ST.	77016	I	69	46 30	81 00	3	T									
CONISTON	GOVERNMENT ROAD/EDWARD ST	77028	I	74	46 29	80 51	4	T									
GARSON	FALCONBRIDGE ROAD	77065	I	76	46 34	80 51	4	T									
NEW SUDBURY	KENNEDY STREET	77075	I	76	46 31	80 57	4	T									
SUDBURY	LONG LAKE ROAD (VILLA LOYOLA)	77096	I	80	46 24	81 01	4	T									
SUDBURY	MIKKOLA (J. HAMILTON SCHOOL)	77201	I	82	46 25	81 07	4	T									
SUDBURY	SCIENCE NORTH	77203	A	84	46 28	80 59	15	T	T	T	T	T			T	T	T
RAYSIDE	ST LAURENT/REGIONAL RD	77206	I	85	46 36	81 06	4	T									
COPPER CLIFF	MARKET STREET	77218	I	87	46 28	81 04	4	T									
SUDBURY	ROBINSON SCHOOL	77225	I	90	46 28	81 00	4	T									
SUDBURY	DOZZI PARK	77228	I	93	46 28	81 02	4	T									
TOTALS: 72 Air Monitoring Stations		**Ambient**	**37**					**49**	**33**	**22**	**39**	**31**	**12**	**12**	**28**	**19**	**27**

LEGEND:

SO2 - Sulphur Dioxide
COH - Coefficient of Haze
CO - Carbon Monoxide
O3 - Ozone
NO2 - Nitrogen Dioxide
NO - Nitric Oxide
NOX - Oxides of Nitrogen

TRS - Total Reduced Sulphur
API - Air Pollution Index
AQI - Air Quality Index
PM10 - Inhalable Particulate
PM2 5 - Respirable Particulate

TABLE 2 ONTARIO NONCONTINUOUS AIR MONITORING NETWORK FOR 1998

SINGLE DIGITS = CYCLE DURATION IN DAYS TYPE = A AMBIENT SURVEY, I SOURCE SPECIFIC SURVEY ELEV = AIR INTAKE HEIGHT ABOVE GROUND (METERS)

ID = STATION IDENTIFICATION NUMBER LAT =LATITUDE(DEGREES MINUTES) LONG = LONGITUDE(DEGREES MINUTES)

CITY	STATION NAME	ID	TYP	YR	LAT	LON	ELEV (M)	TSP	Cd	Cr	Cu	Fe	Mn	Ni	Pb	V	NO3	SO4	Cl	C	RAD
ST MARYS	309 THOMAS ST	11001	I	79	43 15	81 09	3	6													
WINDSOR	WRIGHT/WATER ST	12007	A	84	42 17	83 06	4	6	6	6	6	6	6	6	6	6	6	6	6		
WINDSOR	467 UNIVERSITY AV W	12008	A	70	42 19	83 03	8	6	6	6	6	6	6	6	6	6	6	6			6
WINDSOR	DROUILLARD RD/RICHMOND ST	12011	I	88	42 19	83 00	5	6	6	6	6	6	6	6	6	6					
WINDSOR	FILTRAT PLT.3665 WYANDOTTE ST I	12013	I	71	42 19	83 00	6	6	6	6	6	6	6	6	6	6					
WINDSOR	SEWAGE STN, HWY 18/PROSPECT	12015	A	71	42 17	83 05	5	6	6	6	6	6	6	6	6	6	6	6	6		
WINDSOR	COLLEGE/SOUTH ST	12016	A	78	42 18	83 04	4	6	6	6	6	6	6	6	6	6	6	6	6		
WINDSOR	2885 HOWARD AVE	12038	I	78	42 17	83 01	4	6	6	6	6	6	6	6	6	6	6	6	6		
AMHERSTBURG	415 FRONT ST	12053	I	81	42 08	83 07	11	6									6	6	6		6
AMHERSTBURG	DUFF ST (EAST END)	12055	I	91	42 07	83 06	1	6											6		6
WINDSOR	COLUMBUS CENTRE	12058	I	93	42 17	83 01	5	6	6	6	6	6	6	6	6	6	6	6	6		
WINDSOR	BRENTWOOD CENTRE	12060	I	95	42 17	83 01	6	6	6	6	6	6	6	6	6	6					
WINDSOR	CITY YARD	12064	I	95	42 18	83 02	6	6	6	6	6	6	6	6	6	6					
COURTRIGHT	HWY40 (OPP LAMBTON GS)	14016	A	62	42 48	82 29	4	6	6	6	6	6	6	6	6	6	6	6			6
CORUNNA	R R. #1 (W OF HOUSE)	14030	I	78	42 53	82 17	1	6	6	6	6	6	6	6	6	6					
SARNIA	DAVID/FRONT ST	14151	A	79	42 59	82 24	4	6													
LONDON	900 HIGHBURY AVE	15025	A	96	42 61	81 16	4	6	6	6	6	6	6	6	6	6					6
BEACHVILLE	26 VINE ST (MOE TRAILER)	17015	I	89	43 05	80 50	4	6													
BEACHVILLE	26 VINE ST (MOE TRAILER)	17215	I	89	43 04	80 50	4	6													
BEACHVILLE	26 VINE ST (MOE TRAILER)	17315	I	89	43 04	80 50	4	6													
INGERSOLL	HWY 2 RR 2 (J SPRIEL PROP)	17020	I	81	43 04	81 49	4	6													
EMBRO	OXFORD CTY RD 6 (HESSTON FARM)	17021	I	83	43 06	81 58	1	6													
NANTICOKE	RAINHAM RD/SANDUSK RD	22092	I	85	42 49	80 02	4	6												6	
NANTICOKE	WALPOLE S PS, SANDUSK RD	22904	I	84	42 50	80 02	4	6									6	6			
NANTICOKE	RAINHAM RD (NEAR STELCO GATE)	22907	I	84	42 49	80 05	4	6												6	
NANTICOKE	N 2 KM NANTICOKE GS	22964	I	84	42 50	80 05	4	6													
ELMIRA	18 MILL ST	26054	I	98	43 35	83 30	4	6	6	6	6	6	6	6	6	6					
ELMIRA	CHURCH/DUKE ST	26056	I	98	43 35	83 30	4	6	6	6	6	6	6	6		6					
WELLAND	337 ALBERTA/DEVON ST	27045	I	78	42 58	79 15	1	6												6	
THOROLD	185 QUEEN ST S	27052	I	82	43 07	79 12	1	6	6	6	6	6	6	6	6	6					
NIAGARA FALLS	STP GROUNDS, STANLEY AV	27055	I	82	43 08	79 05	4	6													
ST CATHARINES	27 PLYMOUTH AVE	27057	I	98	43 06	79 05	4	6	6	6	6	6	6	6	6	6					
HAMILTON	ELGIN/KELLY	29000	A	88	43 15	79 52	4	6													
HAMILTON	KENILWORTH	29009	A	69	43 15	79 49	6	6													
HAMILTON	BURLINGTON LEEDS	29011	I	73	43 16	79 49	5	6	6	6	6	6	6	6	6	6	6	6		6	
HAMILTON	BURLINGTON WELLINGTON	29012	A	73	43 16	79 59	7	6													
HAMILTON	BARTON/SANFORD	29025	I	69	43 16	79 51	4	6	6	6	6	6	6	6	6	6	6	6		6	

TABLE 2 ONTARIO NONCONTINUOUS AIR MONITORING NETWORK FOR 1998

SINGLE DIGITS = CYCLE DURATION IN DAYS TYPE = A AMBIENT SURVEY; I SOURCE SPECIFIC SURVEY ELEV = AIR INTAKE HEIGHT ABOVE GROUND (METERS)

ID = STATION IDENTIFICATION NUMBER LAT =LATITUDE(DEGREES MINUTES) LONG = LONGITUDE(DEGREES MINUTES)

CITY	STATION NAME	ID	TYP	YR	LAT	LON	ELEV (M)	TSP	Cd	Cr	Cu	Fe	Mn	Ni	Pb	V	NO3	SO4	Cl	C	RAD
HAMILTON	467 BEACH BLVD	29102	I	85	43 17	79 47	4	6	6	6	6	6	6	6	6	6	6	6		6	
GREENSVILLE	OLFIELD RD/HWY 5	29111	I	86	43 18	79 59	1	6													
HAMILTON	GERTRUDE/DEPEW	29113	I	86	43 15	79 49	4	6													
HAMILTON	VICKERS RD/EAST 18TH ST	29114	A	85	43 14	79 52	3	6	6	6	6	6	6	6	6	6	6	6		6	
HAMILTON	MAIN ST/W HWY 403	29118	A	85	43 15	79 54	3	6													
HAMILTON	MORLEY ST/PARKDALE AV	29119	I	86	43 15	79 47	4	6													
HAMILTON	DUNDURN/YORK	29122	A	87	43 16	79 53	10	6													
HAMILTON	KEEFER COURT/MOEE LAB	29143	I	92	43 24	79 76	4	6													
TORONTO	BRUCE PS. 51 LARCHMOUNT AV	31045	I	86	43 40	79 20	6	1							1						
TORONTO	MOSLEY/LESLIE STS	31058	I	73	43 40	79 20	5	1	1	1	1	1	1	1	1	1					
TORONTO	A R CLARKE CO 633 EASTERN AVE	31065	I	87	43 40	79 20	12	1							1						
TORONTO	WORKS DEPT. 138 HAMILTON AV	31082	I	74	43 40	79 21	5	1							1						
MISSISSAUGA	2360 DIXIE RD	46047	I	95	43 36	79 35	1	6							6						
MISSISSAUGA	MEADOW PARK. APPLE LANE C C	46117	I	87	43 31	79 36	5	6	6	6	6	6	6	6	6	6					
DORSET	HWY117 PAINT LAKE ROAD	49011	A	87	45 13	78 56	1	6													
THUNDER BAY	BOMBARDIER. MONTREAL ST	63046	I	78	48 21	89 18	3	6													
SAULT STE MARI	PUMPHOUSE. BONNEY ST	71042	I	75	46 31	84 23	2	6		6	6	6	6	6						6	
HEARST	GEORGE ST/6TH ST	72114	I	90	49 41	83 39	2	6													
COBALT	ST PATRICK SCHOOL	75048	I	98	47 25	79 40	3	6	6	6	6	6	6	6	6	6					
TOTALS								56	24	25	25	25	25	25	25	25	13	13	7	8	5

LEGEND

TSP - Total Suspended Particulate	Fe - Iron	V - Vanadium	
Cd - Cadmium	Mn - Manganese	N03 - Nitrate	C - Carbon
Cr - Chromium	Ni - Nickel	SO4 - Sulphate	RAD - Radiation
Cu - Copper	Pb - Lead	Cl - Chlorine	

TABLE 3 ONTARIO AIR MONITORING NETWORK FOR PM_{10} 24-HOUR SAMPLING FOR 1998

ID - STATION ID YR - YEAR MONITORING BEGAN LAT - LATITUDE(DEGREES MINUTES) LONG - LONGITUDE(DEGREES MINUTES)
ELEV - AIR INTAKE HEIGHT ABOVE GROUND (METER TYPE - A - AMBIENT SURVEY , I - SOURCE SPECIFIC SURVEY

CITY	STATION NAME	ID	YR	TYPE	LAT	LONG	ELEV (M)	IP	Cu	Fe	Mn	Pb	Cr	Cd	V	Ni	SO4
WINDSOR	WRIGHT WATER STREET	12507	90	I	42 17	82 16	4	6	6	6	6	6	6	6	6	6	6
WINDSOR	467 UNIVERSITY AVE WEST	12508	89	A	42 19	83 02	8	6	6	6	6	6	6	6	6	6	6
WINDSOR	3665 WYANDOTTE ST E	12513	92	I	42 19	83 00	6	6	6	6	6	6	6	6	6	6	6
SARNIA	6TH LINE, MOORE TOWNSHIP	14550	97	I	42 58	82 24	3	6	6	6	6	6	6	6	6	6	6
SARNIA	CENTENNIAL PK/FRONT ST	14561	97	A	42 59	82 24	3	6	6	6	6	6	6	6	6	6	6
LONDON	960 HIGHBURY AVE	15525	96	A	42 61	81 16	4	6	6	6	6	6	6	6	6	6	6
BEACHVILLE	FARL LANTZ PROPERTY	17550	98	I	43 04	80 51	3	6	6	6	6	6	6	6	6	6	6
NANTICOKE	WALPOLE SOUTH P S , SANDUSK	22304	92	I	42 50	80 02	1	6	6	6	6	6	6	6	6	6	6
TEMIRA	18 MILL ST	26365	98	I	43 35	83 30	1	6	6	6	6	6	6	6	6	6	6
ST CATHARINES	KING ST	27308	91	I	43 10	79 15	12	6	6	6	6	6	6	6	6	6	6
THOROLD	185 QUEEN ST. SOUTH	27352	90	I	43 07	79 12	1	6	6	6	6	6	6	6	6	6	6
HAMILTON	ELGIN/KELLY STREET	29300	90	A	43 15	79 52	4	6	6	6	6	6	6	6	6	6	6
HAMILTON	BEACH BLVD	29302	89	I	43 17	79 47	4	6	6	6	6	6	6	6	6	6	6
HAMILTON	GERTRUDE DEPEW STREET	29313	90	I	43 15	79 49	4	6	6	6	6	6	6	6	6	6	6
HAMILTON	BUCHANAN PARK P S	29324	92	A	43 14	79 53	4	6	6	6	6	6	6	6	6	6	6
TORONTO	BAY/WELLESLEY	31127	89	A	43 39	79 23	3	6	6	6	6	6	6	6	6	6	6
ETOBICOKE	EVANS AVE/ARNOLD CRES	35127	97	A	43 37	79 31	5	6	6	6	6	6	6	6	6	6	6
OAKVILLE	BRONTE RD/WOBURN CRES	44127	92	A	43 24	79 44	1	6	6	6	6	6	6	6	6	6	6
MISSISSAUGA	MEADOW PK. APPLE LANE C C	46127	93	I	43 31	79 36	1	6	6	6	6	6	6	6	6	6	6
CORNWALL	MEMORIAL PK. BEDFORD/THIRD	56051	92	A	45 01	74 44	4	6	6	6	6	6	6	6	6	6	6
FORT FRANCES	250 CHURCH STREET	62135	92	I	48 36	93 23	9	6	6	6	6	6	6	6	6	6	6
THUNDER BAY	615 JAMES ST SOUTH	63201	89	A	48 23	89 17	4	6	6	6	6	6	6	6	6	6	6
SAULT STE MARIE	PUMPHOUSE BONNEY STREET	71342	89	I	46 31	84 23	2	6	6	6	6	6	6	6	6	6	6
SAULT STE MARIE	W M MERRIFIELD SCHOOL	71368	90	A	46 32	84 21	3	6	6	6	6	6	6	6	6	6	6
SUDBURY	LISGAR ST	77326	91	A	46 29	80 59	8	6	6	6	6	6	6	6	6	6	6
COPPER CLIFF	MARKET STREET	77570	96	I	46 28	81 04	4	6	6	6	6	6	6	6	6	6	6
			Ambient	12			TOTAL	26	26	26	26	26	26	26	26	26	26

Notes Samplers operate on a 6-day sampling cycle

LEGEND

IP - Inhalable Particulate
Cu - Copper
Fe - Iron
Cr - Chromium
Cd - Cadmium
V - Vanadium
SO4 - Sulphate
Mn - Manganese
Pb - Lead
Ni - Nickel

TABLE 4 ONTARIO METEOROLOGICAL NETWORK FOR 1998

ID - STATION ID NUMBER
YR - YEAR MONITORING BEGAN
T - TELEMETRY
LAT - LATITUDE(DEGREES:MINUTES)
LONG - LONGITUDE(DEGREES MINUTES)

CITY	STATION NAME	ID	YR	LAT	LONG	WS1/WD1	HT1	WS2/WD2	HT2	WS3/WD3	HT3	TEM	DT1	DT2
WINDSOR	WRIGHT/WATER ST	12007	84	42:17	82:16	T	10	T	40			T	T	
MERLIN	WATER PUMP STATION, MIDDLE ROAD	13021	77	42:15	82:13	T	9							
COURTRIGHT	HWY 40 (OPPOSITE LAMBTON GS	14016	75	42:48	82:29	T	10	T	30	T	90	T	T	T
PARKHILL	PUC BUILDING	15013	83	43:10	81:41	T	10							
LONDON	800 COMMISSIONERS AVE	15018	86	42:57	81:13	T	25							
BEACHVILLE	26 VINE STREET	17015	89	43:04	80:51	T	9							
TIVERTON	BRUCE GS WEATHER STATION	18017	79	44:18	81:35	T	10	T	30			T	T	T
JARVIS	HYDRO MET TOWER, 2KM N OFJARVIS	22883	84	42:54	80:05	T	10			T	85	T		
LONG POINT	PROVINCIAL PARK	22901	79	42:35	80:23	T	10			T	85	T		
NANTICOKE	RAINHAM ROAD (NEAR STELCO GATE)	22907	89	42:48	80:04	T	10							
CAMBRIDGE	CLYDE ROAD	26066	91	43:38	80:29	T	30							
ALLANBURG	TRANSFORMER STATION HWY 58	27011	81	43:04	79:11	T	10	T	37			T	T	
FLAMBOROUGH	MOXLEY/HWY 5	29117	96	43:13	79:33	T	10							
HAMINTON	BRAMPTON/WOODWARD	29026	75	43:15	79:46	T	10	T	30	T	91	T	T	T
HAMILTON	HILLYARD ST	29531	96	43:29	79:55	T	7							
TORONTO	BRUCH PS, 51 LARCHMOUNT ST	31045	75	43:39	79:25	T	21							
TORONTO	PERTH/RUSKIN, JUNCTION TRIANGLE	31120	82	43:40	79:27	T	18							
SCARBOROUGH	LAWRENCE/KENNEDY AVE	33003	75	43:45	79:16	T	12			T	76	T	T	
ETOBICOKE	EVANS/ARNOLD AVE	35033	75	43:37	79:31	T	10	T	30	T	91	T	T	T
BURLINGTON	HWY 2/NORTH SHORE BLVD	44008	79	43:19	79:48	T	10							
OAKVILLE	BRONTE ROAD/WOBURN CRES	44015	80	43:24	79:44	T	10							
STOUFFVILLE	HWY 47/EAST OF HWY 48	48002	82	43:58	79:16	T	10							
KINGSTON	133 DATLTON ST	52020	93	44:15	76:31	T	10							
DRYDEN	35 VAN HORNE AVE	61027	84	49:47	92:50	T	18					T		
CORNWALL	MEMORIAL PARK	56051	85	45:01	74:44	T	10							
FORT FRANCES	EIGHT ST/CORNWALL AVE	62047	90	48:37	93:25	T	10					T		
MARATHON	PERTER ST	63033	91	48:43	86:23	T	8							
RED ROCK	RECREATION CENTRE/BROMPTON ROAD	63084	81	48:57	88:15	T	15							
TERRACE BAY	ST MARTIN SCHOOL, SELKIRK ST	63090	82	48:47	87:05	T	12					T		
THUNDER BAY	615 JAMES STREET SOUTH	63200	90	48:22	89:17	T	10							
SAULT STE MARIE	WM MERRIFIELD SCHOOL	71068	87	46:32	84:21	T	10					T		
HEARST	MNR, 613 FRONT ST	72113	95	49:41	83:39	T	16							
NORTH BAY	CHIPPEWA ST	75010	87	46:19	79:27	T	10					T		
SUDBURY	HANMER	77013	82	46:39	80:57	T	10					T		
SUDBURY	CKNC-TV, 699 FROOD ROAD	77025	73	46:30	81:00	T	10			T	115	T		T

LEGEND:

WS1/WD1 - WIND SPEED AND DIRECTION BELOW 23 M
WS2/WD2 - WIND SPEED AND DIRECTION 23 M TO 76 M
WS3WD3 - WIND SPEED AND DIRECTION ABOVE 76 M

HT1 - SENSOR HEIGHT (METRES) LEVEL 1
HT2 - SENSOR HEIGHT (METRES) LEVEL 2
HT3 - SENSOR HEIGHT (METRES) LEVEL 3

TEM - AMBIENT TEMPERATURE
DT1 - TEMPERATURE DIFFERENCE LEVEL 2 MINUS 1
DT2 - TEMPERATURE DIFFERENCE LEVEL 3 MINUS 1

TABLE 5 Sulphur Dioxide (SO_2) Statistics (1998)

Unit: parts per billion (ppb)

SO_2 1-hour AAQC is 250 ppb

SO_2 24-hour AAQC is 100 ppb

SO_2 1-year AAQC is 20 ppb

				PERCENTILES							Maximum		# of times above Criteria		
Stn #	City	Location	Valid h	10%	30%	50%	70%	90%	99%	Mean	1h	24h	1h	24h	1y
12007	Windsor	Wright/Water St	8679	2	4	6	9	16	34	7.9	99	32.3	0	0	0
12008	Windsor	467 University Av W	8658	1	3	5	8	17	39	7.4	84	31.3	0	0	0
12016	Windsor	College/South St	8563	2	5	9	13	25	59	12.0	234	47.4	0	0	0
14016	Courtright	Hwy40 (OPP Lambton GS)	8724	2	4	6	8	18	62	9.0	191	31.8	0	0	0
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	8686	1	2	4	6	21	116	10.3	295	110.2	1	1	0
15025	London	900 Hightbury Ave	8683	0	1	2	4	8	15	3.2	47	12.0	0	0	0
18007	Tiverton	Concession Rd 2 Lot A	4045	0	1	2	3	6	18	2.7	84	14.4	0	0	0
22071	Simcoe	Experimental Farm	8606	0	1	2	4	9	21	3.8	117	18.8	0	0	0
22086	Nanticoke	Cheapside Rd(3 Km S of Hwy 3)	8330	0	1	3	5	12	37	5.0	213	30.7	0	0	0
22901	Long Point	Provincial Park	8045	0	1	2	3	7	15	3.0	47	12.1	0	0	0
22904	Nanticoke	Walpole S Ps Sandusk Rd	8166	0	1	3	5	12	34	4.9	83	23.3	0	0	0
22907	Nanticoke	Rainham Rd (Near Stelco Gate)	8318	0	1	3	5	13	41	5.4	137	48.2	0	0	0
26060	Kitchener	West Ave/Homewood	8418	1	1	2	3	7	15	3.0	54	16.1	0	0	0
27067	St Catharines	Argyle Cres (Pump Stn)	8061	0	1	2	5	10	18	4.0	41	14.1	0	0	0
29000	Hamilton	Elgin/Kelly St	8621	1	2	4	6	15	41	6.3	103	24.3	0	0	0
29025	Hamilton	Barton/Wentworth	6844	0	0	2	5	15	45	5.2	90	30.0	0	0	0
29102	Hamilton	467 Beach Blvd	6871	0	2	4	7	24	72	8.8	141	78.8	0	0	0
29114	Hamilton	Vickers Rd/East 18Th St	8437	0	2	4	7	17	42	6.6	132	36.0	0	0	0
29118	Hamilton	Main St W/Hwy403	8069	0	1	2	4	10	24	3.8	63	16.4	0	0	0
31103	Toronto	Bay/Grosvenor	8336	1	2	3	4	8	16	4.0	65	17.6	0	0	0
33003	Scarborough	Lawrence/Kennedy	8228	1	2	3	5	9	17	4.2	64	15.2	0	0	0
34020	North York	Hendon Ave (Yonge/Finch)	7924	1	2	3	5	9	22	4.2	100	18.1	0	0	0
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	7439	1	2	3	4	8	23	4.1	200	17.6	0	0	0
35033	Etobicoke	Evans/Arnold Av	8538	1	3	4	5	9	19	4.7	66	16.3	0	0	0
36030	York	Clearview Heights	8642	1	3	5	7	11	24	6.0	92	17.2	0	0	0
44008	Burlington	Hwy2/North Shore Blvd E	6603	0	1	2	3	7	17	3.2	99	10.4	0	0	0
44015	Oakville	Bronte Rd/Woburn Cres	8663	1	2	3	5	11	26	5.1	50	21.1	0	0	0
45025	Oshawa	Ps Ritson Rd/Olive Av	8622	1	2	4	6	10	20	4.8	47	17.4	0	0	0
46110	Mississauga	Queensway W/Hurontario St	8209	1	3	4	6	9	24	5.1	205	30.3	0	0	0

TABLE 5 Sulphur Dioxide (SO_2) Statistics (1998)

Unit: parts per billion (ppb)

SO_2 1-hour AAQC is 250 ppb

SO_2 24-hour AAQC is 100 ppb

SO_2 1-year AAQC is 20 ppb

				PERCENTILES							Maximum		# of times above Criteria		
Stn #	City	Location	Valid h	10%	30%	50%	70%	90%	99%	Mean	1h	24h	1h	24h	1y
46117	Mississauga	Meadow Pk, Apple Lane Club	7922	1	2	3	5	9	19	4.4	69	19.7	0	0	0
49010	Dorset	Hwy 117/Paint Lake Rd	1981	0	0	0	0	2	9	INS	44	12.5	0	0	INS
51001	Ottawa	Mcd Gds, Rideau/Wurtemburg St	8386	0	1	2	5	9	13	3.4	67	17.8	0	0	0
56051	Cornwall	PM10 Memorial Pk Bedford/Third	8560	0	2	3	5	13	42	5.5	90	34.0	0	0	0
59006	Peterborough	10 Hospital Drive	725	0	0	1	3	5	10	INS	23	5.5	0	0	INS
63200	Thunder Bay	MTO 615 James St S	8725	0	0	0	0	1	6	0.4	51	5.2	0	0	0
71068	Sault Ste Marie	Wm Merrifield School	8686	0	0	0	1	4	32	1.9	93	25.4	0	0	0
77012	Sudbury	Skead	8719	0	0	1	3	10	129	6.8	549	132.1	18	1	0
77013	Sudbury	Hanmer	8337	0	0	1	2	5	54	3.5	386	45.1	2	0	0
77016	Sudbury	Water Tank Ash St	8743	0	1	1	3	18	108	7.9	646	79.5	22	0	0
77028	Coniston	Government Rd/Edward St	8750	0	0	0	1	8	94	4.6	324	55.0	5	0	0
77065	Garson	Falconbridge Rd	8645	0	0	1	2	7	86	4.7	677	48.5	9	0	0
77075	New Sudbury	Kennedy St	7895	0	1	1	3	11	100	6.0	412	49.5	4	0	0
77096	Sudbury	Long Lake Rd (Villa Loyola)	8754	0	0	1	2	10	90	5.2	462	45.4	7	0	0
77201	Sudbury	Mikkola (J. Hamilton School)	8662	0	1	1	2	9	90	5.4	528	72.1	11	0	0
77203	Sudbury	Science North	7533	0	0	1	2	8	84	5.2	414	79.6	6	0	0
77206	Rayside	St Laurent/Regional Rd	8728	0	0	1	1	4	33	2.2	256	37.5	1	0	0
77218	Copper Cliff	Market Street	8705	0	0	2	3	18	162	9.2	684	150.0	30	1	0
77225	Sudbury	Robinson School	7269	0	0	0	2	10	116	5.8	407	85.2	15	0	0
77228	Sudbury	Dozzi Park	8573	0	0	0	2	8	87	4.7	468	72.7	8	0	0

Table 6 Suspended Particles (SP) Statistics (1998)

Unit: COHS/1000 FT
COH 24-hour AAQC is 1.0 COH unit
COH 1-year AAQC is 0.5 COH unit

Stn	City	Location	Valid h	PERCENTILES 10%	30%	50%	70%	90%	99%	Mean	Maximum 1h	24h	# of times above Criteria 24h	1y
12008	Windsor	467 University Av W	8309	0.1	0.1	0.2	0.2	0.4	0.9	0.20	1.9	0.72	0	0
12016	Windsor	College/South St	7890	0.1	0.1	0.2	0.3	0.5	1.1	0.27	2.6	0.78	0	0
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	8650	0.0	0.1	0.1	0.2	0.4	0.8	0.19	2.3	0.67	0	0
15025	London	900 Hightbury Ave.	8615	0.0	0.1	0.1	0.2	0.4	0.7	0.18	1.4	0.63	0	0
22907	Nanticoke	Rainham Rd (Near Stelco Gate)	8461	0.0	0.1	0.1	0.2	0.4	0.6	0.18	2.9	0.58	0	0
26060	Kitchener	West Ave/Homewood	8181	0.0	0.1	0.1	0.2	0.4	0.8	0.18	1.7	1.00	0	0
27067	St Catharines	Argyle Cres (Pump Stn)	7861	0.0	0.1	0.2	0.2	0.4	1.0	0.21	3.6	1.15	2	0
29000	Hamilton	Elgin/Kelly St	8516	0.1	0.2	0.2	0.4	0.7	1.4	0.33	3.3	1.22	4	0
29025	Hamilton	Barton/Wentworth	6779	0.0	0.1	0.2	0.4	0.7	1.5	0.31	3.8	1.22	9	0
29102	Hamilton	467 Beach Blvd	7193	0.1	0.1	0.3	0.4	0.7	1.5	0.33	4.8	0.98	0	0
29114	Hamilton	Vickers Rd/East 18Th St	8431	0.1	0.1	0.2	0.3	0.5	1.1	0.24	3.3	1.27	2	0
29118	Hamilton	Main St W/Hwy403	8373	0.1	0.1	0.2	0.3	0.7	1.2	0.30	2.0	1.28	1	0
29531	Hamilton	Ji Case	7855	0.1	0.2	0.4	0.6	1.2	2.6	0.54	5.0	2.08	29	1
29547	Hamilton	Pier 25	6103	0.1	0.2	0.3	0.5	0.8	1.6	0.41	3.0	1.15	3	0
29561	Hamilton	Hamilton - Homeside	7822	0.1	0.2	0.2	0.4	0.6	1.2	0.31	5.0	0.95	0	0
31103	Toronto	Bay/Grosvenor	2018	0.1	0.1	0.2	0.3	0.4	0.9	INS	1.5	0.73	0	INS
33003	Scarborough	Lawrence/Kennedy	1956	0.1	0.1	0.2	0.2	0.4	0.9	INS	1.6	0.84	0	INS
34020	North York	Hendon Ave (Yonge/Finch)	2020	0.1	0.1	0.2	0.3	0.6	1.1	INS	1.7	0.85	0	INS
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	2017	0.1	0.1	0.2	0.2	0.5	1.1	INS	2.2	0.84	0	INS
35033	Etobicoke	Evans/Arnold Av	8465	0.1	0.2	0.3	0.4	0.7	1.3	0.34	2.7	0.95	0	0
36030	York	Clearview Heights	8527	0.1	0.1	0.2	0.3	0.5	1.3	0.27	2.7	0.94	0	0
44008	Burlington	Hwy2/North Shore Blvd E	8002	0.0	0.1	0.2	0.3	0.5	1.0	0.24	2.6	0.99	0	0
44015	Oakville	Bronte Rd/Woburn Cres	8675	0.0	0.1	0.2	0.3	0.5	1.0	0.22	2.8	0.85	0	0
45025	Oshawa	Ps Ritson Rd/Olive Av	3615	0.1	0.1	0.2	0.3	0.5	0.9	INS	1.7	0.69	0	INS
46110	Mississauga	Queensway W/Hurontario St	7316	0.1	0.2	0.3	0.4	0.7	1.3	0.33	2.4	0.97	0	0
51001	Ottawa	Med Gds, Rideau/Wurtemburg St	8324	0.0	0.1	0.1	0.2	0.4	0.7	0.17	1.8	0:79	0	0
52020	Kingston	Dalton Street	8364	0.0	0.1	0.1	0.1	0.3	0.7	0.13	1.5	0.46	0	0
56051	Cornwall	PM10 Memorial Pk Bedford/Third	8627	0.0	0.0	0.1	0.1	0.2	0.6	0.09	1.4	1.03	0	1
62200	Fort Frances	Robert Moore PS	8738	0.0	0.0	0.1	0.1	0.2	0.5	0.10	2.1	0.42	0	0
63200	Thunder Bay	MTO 615 James St S	8622	0.0	0.1	0.1	0.2	0.4	0.8	0.16	3.6	0.61	0	0
71068	Sault Ste Marie	Wm. Merrifield School	8441	0.0	0.1	0.1	0.2	0.4	0.9	0.19	2.2	0.63	0	0
75010	North Bay	Dept National Defence, Chippewa St	7883	0.1	0.2	0.2	0.3	0.4	0.7	0.22	2.4	0.70	0	0
77203	Sudbury	Science North	6959	0.0	0.0	0.1	0.1	0.2	0.4	0.09	0.9	0.38	0	0

TABLE 7 Total Reduced Sulphur (TRS) Statistics (1998)

Unit: parts per billion (ppb)

TRS 1-hour AAQC is 27 ppb

Stn #	City	Location	Valid h	PERCENTILES 10%	30%	50%	70%	90%	99%	Mean	Maximum 1h	24h	Exceedances of Pulp Mill Criterion 1h
12007	Windsor	Wright/Water St	8495	0	0	0	1	2	10	0.8	34	6.5	1
12016	Windsor	College/South St	8563	0	0	0	1	3	17	1.3	132	14.2	28
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	8681	0	0	0	0	1	3	0.3	18	7.4	0
18007	Tiverton	Concession Rd 2 Lot A	4044	0	0	0	0	1	1	0.2	5	1.0	0
22904	Nanticoke	Walpole S Ps Sandusk Rd	8412	0	0	0	1	1	3	0.6	54	2.7	1
22907	Nanticoke	Rainham Rd (Near Stelco Gate)	8373	0	0	1	1	2	10	0.9	36	10.0	4
29000	Hamilton	Elgin/Kelly St	8481	0	0	0	1	2	8	0.7	21	6.7	0
29025	Hamilton	Barton/Wentworth	7411	0	0	1	1	3	8	1.3	22	6.0	0
29102	Hamilton	467 Beach Blvd	6278	0	0	0	1	5	13	1.5	41	11.8	5
29114	Hamilton	Vickers Rd/East 18Th St	7194	0	0	1	1	3	7	1.2	22	7.3	0
29118	Hamilton	Main St W/Hwy403	7971	0	0	1	1	3	7	0.9	18	7.2	0
29531	Hamilton	Jt Case	8493	0	0	1	1	6	20	2.1	80	23.0	39
29547	Hamilton	Pier 25	7958	0	0	1	2	8	25	2.9	242	21.1	55
44015	Oakville	Bronte Rd/Woburn Cres	8698	0	0	1	2	3	5	1.1	22	7.5	0
46117	Mississauga	Meadow Pk, Apple Lane Club	7958	1	1	1	1	2	3	1.2	11	2.4	0
56051	Cornwall	PM10 Memorial Pk Bedford/Third	8743	0	1	1	1	3	5	1.2	19	4.7	0
61027	Dryden	35 Van Horne Av	8732	0	0	0	0	1	9	0.5	122	12.0	7
62030	Fort Frances	Portage/Church St	8734	0	0	0	0	4	20	1.4	148	23.4	48
62032	Fort Frances	Cemetery, Colonization Rd W	8131	0	0	0	0	2	14	0.8	240	22.6	24
62047	Fort Frances	Eighth St/Cornwall Ave	8730	0	0	0	0	2	34	1.4	191	41.7	116
62200	Fort Frances	Robert Moore PS	8725	0	0	0	0	1	11	0.6	208	27.9	36
63033	Marathon	Water Tower	8727	0	0	0	0	0	3	0.1	26	3.1	0
63046	Thunder Bay	Bombardier, Montreal St	8734	0	0	0	0	4	21	1.3	79	13.4	33
63084	Red Rock	Recreation Centre	8531	0	0	0	0	7	49	2.8	178	34.2	250
63090	Terrace Bay	St Martin School	8577	0	0	0	1	3	15	1.0	64	12.9	27
63092	Terrace Bay	Terrace Heights Dr	8704	0	0	0	0	2	26	1.3	87	21.2	78
63200	Thunder Bay	MTO 615 James St S	8723	0	0	0	0	0	3	0.1	13	2.0	0
71068	Sault Ste Marie	Wm. Merrifield School	8467	0	0	0	0	0	5	0.2	37	4.1	3
77203	Sudbury	Science North	7549	0	0	0	1	1	1	0.4	2	1.0	0

TABLE 8 Carbon Monoxide (CO) Statistics (1998)

Unit: parts per million (ppm)
CO 1-hour AAQC is 30 ppm
CO 8-hour AAQC is 13 ppm

				PERCENTILES							Maximum		# of times above Criteria	
Stn	City	Location	Valid h	10%	30%	50%	70%	90%	99%	Mean	1h	8h	1h	8h
12008	Windsor	467 University Av W	8597	0	0	1	1	1	3	0.7	6	2.9	0	0
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	8003	0	0	0	1	1	1	0.3	3	1.9	0	0
15025	London	900 Hightbury Ave.	8723	0	0	0	0	0	2	0.1	3	2.9	0	0
26060	Kitchener	West Ave/Homewood	8454	0	0	0	0	1	2	0.3	6	4.4	0	0
27067	St Catharines	Argyle Cres (Pump Stn)	8103	0	0	0	1	1	2	0.4	7	2.6	0	0
29000	Hamilton	Elgin/Kelly St	8631	1	1	1	1	2	2	1.1	6	3.1	0	0
29118	Hamilton	Main St W/Hwy403	7991	0	0	1	1	1	2	0.6	4	3.0	0	0
31103	Toronto	Bay/Grosvenor	8468	1	1	1	1	2	2	1.1	4	2.9	0	0
33003	Scarborough	Lawrence/Kennedy	8326	0	1	1	1	1	2	0.9	4	3.3	0	0
34020	North York	Hendon Ave (Yonge/Finch)	8548	0	1	1	1	2	2	1.0	7	2.9	0	0
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	7746	1	1	1	1	1	2	1.0	4	3.3	0	0
35033	Etobicoke	Evans/Arnold Av	8550	0	1	1	1	1	2	0.9	6	3.4	0	0
36030	York	Clearview Heights	8674	0	1	1	1	1	3	0.8	8	3.9	0	0
44008	Burlington	Hwy2/North Shore Blvd E	8036	0	0	0	0	1	1	0.3	6	4.6	0	0
44015	Oakville	Bronte Rd/Woburn Cres	8593	0	0	0	0	1	1	0.2	4	1.8	0	0
45025	Oshawa	Ps Ritson Rd/Olive Av	8628	0	1	1	1	1	3	1.0	8	4.1	0	0
46110	Mississauga	Queensway W/Hurontario St	4629	0	1	1	1	2	3	1.1	6	3.3	0	0
51001	Ottawa	Mcd Gds, Rideau/Wurtemburg St	8400	0	1	1	2	2	3	1.1	4	4.0	0	0
56051	Cornwall	PM10 Memorial Pk Bedford/Third	8703	0	0	0	0	1	1	0.3	3	2.0	0	0
59006	Peterborough	10 Hospital Drive	728	0	1	1	1	2	3	INS	6	3.4	0	0
63200	Thunder Bay	MTO 615 James St S	8740	0	0	0	0	1	1	0.1	3	1.6	0	0
77203	Sudbury	Science North	7539	0	0	0	0	0	1	0.0	2	1.6	0	0

TABLE 9 Nitrogen Dioxide (NO_2) Statistics (1998)

Unit: parts per billion (ppb)

NO_2 1-hour AAQC is 200 ppb

NO_2 24-hour AAQC is 100 ppb

				PERCENTILES							Maximum		# of times above Criteria	
Stn #	City	Location	Valid h	10%	30%	50%	70%	90%	99%	Mean	1h	24h	1h	24h
12008	Windsor	467 University Av W	8649	12	17	22	28	38	56	23.8	117	46.0	0	0
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	7453	6	10	15	22	36	55	18.0	97	49.3	0	0
15013	Parkhill	Puc Bldg	8507	3	5	7	10	17	29	8.6	46	41.8	0	0
15025	London	900 Hightbury Ave.	8706	5	11	16	22	33	50	17.7	69	50.1	0	0
22071	Simcoe	Experimental Farm	6657	3	5	7	10	18	39	9.2	104	44.5	0	0
22086	Nanticoke	Cheapside Rd(3 Km S of Hwy 3)	7960	3	5	6	9	14	29	7.8	46	34.0	0	0
22901	Long Point	Provincial Park	6096	3	4	6	9	15	31	8.0	46	27.7	0	0
26060	Kitchener	West Ave/Homewood	8195	4	8	14	21	32	54	16.5	78	57.5	0	0
27067	St Catharines	Argyle Cres (Pump Stn)	7283	6	9	13	19	29	46	15.7	61	41.6	0	0
29000	Hamilton	Elgin/Kelly St	8603	9	15	21	27	38	57	22.4	95	59.7	0	0
29102	Hamilton	467 Beach Blvd	3558	4	9	15	22	34	53	INS	75	45.4	0	0
29114	Hamilton	Vickers Rd/East 18Th St	8160	5	9	14	20	33	52	16.8	80	47.4	0	0
29118	Hamilton	Main St W/Hwy403	6971	9	14	21	29	41	65	23.4	88	68.4	0	0
31103	Toronto	Bay/Grosvenor	8501	14	21	26	32	42	61	27.7	80	61.2	0	0
31190	Toronto	CN Tower, 301 Front St W	5149	2	5	8	12	21	41	INS	77	45.0	0	0
33003	Scarborough	Lawrence/Kennedy	8219	11	18	24	31	42	61	25.5	87	62.1	0	0
34020	North York	Hendon Ave (Yonge/Finch)	8528	7	13	22	30	42	62	23.4	92	58.8	0	0
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	7820	11	17	24	32	44	65	26.2	83	57.7	0	0
35033	Etobicoke	Evans/Arnold Av	8538	16	23	28	34	46	67	29.7	93	55.8	0	0
36030	York	Clearview Heights	8668	9	16	22	28	38	56	23.0	102	52.6	0	0
44008	Burlington	Hwy2/North Shore Blvd E	8031	4	9	15	21	31	47	16.6	82	36.4	0	0
44015	Oakville	Bronte Rd/Woburn Cres	7540	7	11	15	20	30	51	17.1	85	42.5	0	0
45025	Oshawa	Ps Ritson Rd/Olive Av	8621	6	11	18	26	37	57	20.0	87	49.3	0	0
46110	Mississauga	Queensway W/Hurontario St	4628	11	16	21	28	37	51	23.1	101	49.3	0	0
48002	Stouffville	Hwy47/E of Hwy48	8247	3	6	9	13	24	38	11.5	57	35.8	0	0
49010	Dorset	Hwy 117/Paint Lake Rd	1981	1	2	2	4	8	18	INS	36	22.6	0	0
51001	Ottawa	Mcd Gds, Rideau/Wurtemburg St	8325	0	5	10	16	28	49	12.4	75	51.9	0	0
63200	Thunder Bay	MTO 615 James St S	7705	4	6	10	15	25	41	12.3	68	36.8	0	0
71068	Sault Ste Marie	Wm Merrifield School	7845	1	4	8	14	24	37	10.3	55	29.6	0	0
77203	Sudbury	Science North	5501	1	3	5	7	12	26	INS	46	18.0	0	0

TABLE 10 Nitrogen Oxide (NO) Statistics (1998)

Unit: parts per billion (ppb)

				PERCENTILES							Maximum	
Stn #	City	Location	Valid h	10%	30%	50%	70%	90%	99%	Mean	1h	24h
12008	Windsor	467 University Av W	8649	3	6	10	16	34	118	16.3	405	96.6
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	7453	1	2	3	6	15	54	6.9	172	49.4
15013	Parkhill	Puc Bldg	8507	0	1	2	4	7	11	3.1	364	9.1
15025	London	900 Hightbury Ave.	8706	2	3	5	8	17	86	9.1	261	70.8
22071	Simcoe	Experimental Farm	6657	0	0	0	1	3	15	1.3	62	18.1
22086	Nanticoke	Cheapside Rd(3 Km S of Hwy 3)	7960	0	1	2	4	5	15	2.9	114	17.1
22901	Long Point	Provincial Park	6096	0	0	0	1	2	10	0.9	39	7.6
26060	Kitchener	West Ave/Homewood	8195	0	1	2	4	12	100	6.9	441	114.8
27067	St Catharines	Argyle Cres (Pump Stn)	7283	3	4	6	10	36	179	16.3	405	136.9
29000	Hamilton	Elgin/Kelly St	8603	1	2	4	9	29	139	12.6	378	156.0
29102	Hamilton	467 Beach Blvd	3558	2	3	7	16	38	92	INS	249	49.9
29114	Hamilton	Vickers Rd/East 18Th St	8160	1	2	3	5	21	90	8.8	663	275.0
29118	Hamilton	Main St W/Hwy403	6971	1	3	8	20	81	265	28.3	525	260.0
31103	Toronto	Bay/Grosvenor	8501	3	9	16	27	54	134	24.3	335	110.8
31190	Toronto	CN Tower, 301 Front St W	5149	0	0	1	2	7	40	INS	222	34.6
33003	Scarborough	Lawrence/Kennedy	8219	1	5	12	23	54	180	23.2	453	173.6
34020	North York	Hendon Ave (Yonge/Finch)	8528	1	2	5	15	44	139	16.5	270	108.6
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	7820	1	2	5	12	49	175	17.9	481	144.4
35033	Etobicoke	Evans/Arnold Av	8538	4	9	18	30	68	197	29.8	722	162.0
36030	York	Clearview Heights	8668	2	5	10	17	54	215	22.5	538	154.5
44008	Burlington	Hwy2/North Shore Blvd E	8031	1	2	5	11	33	139	14.1	318	107.3
44015	Oakville	Bronte Rd/Woburn Cres	7540	4	8	10	13	30	115	15.8	426	105.6
45025	Oshawa	Ps Ritson Rd/Olive Av	8621	2	4	6	13	36	146	15.6	485	104.6
46110	Mississauga	Queensway W/Hurontario St	4628	1	3	8	16	50	192	20.1	406	106.1
48002	Stouffville	Hwy47/E of Hwy48	8247	0	1	2	3	9	44	4.1	193	39.8
49010	Dorset	Hwy 117/Paint Lake Rd	1982	0	0	1	1	1	2	INS	10	2.8
51001	Ottawa	Mcd Gds, Rideau/Wurtemburg St	8325	0	2	4	8	17	68	7.9	384	41.3
63200	Thunder Bay	MTC 615 James St S	7705	1	2	4	7	23	103	9.9	245	69.5
71068	Sault Ste Marie	Wm. Merrifield School	7845	0	1	2	5	16	75	6.7	241	46.6
77203	Sudbury	Science North	5501	0	2	3	4	7	22	INS	80	16.3

TABLE 11 Total Nitrogen Oxides (NOx) Statistics (1998)

Unit: parts per billion (ppb)

				PERCENTILES							Maximum	
Stn #	City	Location	Valid h	10%	30%	50%	70%	90%	99%	Mean	1h	24h
12008	Windsor	467 University Av W	8649	16	23	31	41	68	161	38.5	521	139.3
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	7453	9	13	18	27	51	105	25.1	244	90.4
15013	Parkhill	Puc Bldg	8507	4	6	8	10	18	33	9.5	74	45.1
15025	London	900 Hightbury Ave	8706	9	14	19	28	47	127	25 8	318	119.8
22071	Simcoe	Experimental Farm	6657	3	5	8	11	20	50	10 3	140	62.1
22086	Nanticoke	Cheapside Rd(3 Km S of Hwy 3)	7960	4	6	9	11	18	39	10 4	153	47.8
22901	Long Point	Provincial Park	6096	3	5	7	10	17	37	8 8	74	34.2
26060	Kitchener	West Ave/Homewood	8195	6	10	17	25	45	143	23.9	476	173 4
27067	St Catharines	Argyle Cres (Pump Stn)	7283	9	14	20	29	65	210	31 7	452	172.1
29000	Hamilton	Elgin/Kelly St	8603	11	18	25	37	64	182	34 7	437	215 5
29102	Hamilton	467 Beach Blvd	3558	6	11	22	40	73	152	INS	329	102.8
29114	Hamilton	Vickers Rd/East 18Th St	8160	7	12	17	27	54	126	25.4	479	162 3
29118	Hamilton	Main St W/Hwy403	6971	11	19	30	50	122	316	52.1	598	326 7
31103	Toronto	Bay/Grosvenor	8501	20	32	44	59	91	177	51 6	410	172.0
31190	Toronto	CN Tower, 301 Front St W	5149	2	6	9	14	28	75	INS	299	80.1
33003	Scarborough	Lawrence/Kennedy	8219	13	25	37	53	93	230	48 3	530	235.1
34020	North York	Hendon Ave (Yonge/Finch)	8528	8	17	28	47	84	184	39.9	345	159.8
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	7820	12	20	30	46	90	224	43.7	553	193 0
35033	Etobicoke	Evans/Arnold Av	8538	22	35	48	65	110	250	59.9	797	213 3
36030	York	Clearview Heights	8668	13	21	30	43	88	251	44 0	643	208.1
44008	Burlington	Hwy2/North Shore Blvd E	8030	6	13	22	33	62	177	30 7	366	143 0
44015	Oakville	Bronte Rd/Woburn Cres	7540	12	16	21	30	55	144	30 0	468	126 0
45025	Oshawa	Ps Ritson Rd/Olive Av	8621	8	15	25	39	70	183	35.1	530	131.0
46110	Mississauga	Queensway W/Hurontario St	4628	13	21	30	43	86	232	43 0	505	135 0
48002	Stouffville	Hwy47/E of Hwy48	8247	4	7	11	17	32	76	15.5	229	65.2
49010	Dorset	Hwy 117/Paint Lake Rd	1981	1	2	3	4	9	19	INS	45	24.8
51001	Ottawa	Mcd Gds, Rideau/Wurtemburg St	8325	6	11	17	25	46	108	22.8	379	85.5
63200	Thunder Bay	MTO 615 James St S	7705	5	9	14	22	49	139	22 6	304	104 5
71068	Sault Ste Marie	Wm Merritfield School	7846	1	5	10	19	38	103	16.7	273	75.9
77203	Sudbury	Science North	5501	3	5	7	10	17	42	INS	125	32.8

TABLE 12 Ozone (O_3) Statistics (1998)

Unit: parts per billion (ppb)

O_3 1-hour AAQC is 80 ppb

Stn #	City	Location	Valid h	PERCENTILE 10	30	50	70	90	99	Arith. Mean	Maximum 1h	24h	# of times above Criterion 1 h
12008	Windsor	467 University Av W	8670	2	8	16	27	50	80	21.4	123	81.9	87
12016	Windsor	College/South St	8249	1	5	14	25	45	75	18.7	113	64.9	51
13021	Merlin	MOE Water Pump Stn Middle Rd	8667	7	17	25	35	54	85	28.4	126	75.5	133
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	8696	3	14	24	34	50	83	26.1	125	75.5	106
14118	Mandaumin	Concession Rd 26	8316	9	20	28	36	52	85	29.9	127	69.5	129
15009	Longwoods	Longwoods Conservation	8740	4	15	24	33	49	77	25.9	108	62.1	59
15013	Parkhill	Puc Bldg	8568	8	18	26	35	52	85	28.7	132	78.6	123
15020	Grand Bend	Water Treatment Plant	8705	10	22	30	37	53	85	31.2	138	73.8	130
15025	London	900 Hightbury Ave	8722	4	14	21	30	52	84	25.1	107	72.6	123
18007	Tiverton	Concession Rd 2 Lot A	8608	14	25	31	37	51	82	32.2	123	76.0	97
22071	Simcoe	Experimental Farm	7998	11	20	28	38	56	83	31.1	108	73.4	105
22901	Long Point	Provincial Park	7605	13	21	29	39	61	93	32.9	120	82.1	226
26060	Kitchener	West Ave/Homewood	8416	2	14	23	33	50	81	25.4	137	90.3	89
27067	St Catharines	Argyle Cres (Pump Stn)	7770	2	8	17	27	46	75	20.8	109	71.0	39
29000	Hamilton	Elgin/Kelly St	8625	1	8	16	25	43	71	19.1	95	64.4	19
29114	Hamilton	Vickers Rd/East 18Th St	8511	1	13	21	31	50	78	24.1	124	76.3	74
29118	Hamilton	Main St W/Hwy403	8242	1	7	16	25	43	73	19.3	91	66.0	34
31103	Toronto	Bay/Grosvenor	8362	2	7	14	23	39	67	17.8	136	58.1	22
31190	Toronto	CN Tower, 301 Front St W	5169	12	21	28	35	48	81	INS	110	86.9	55
33003	Scarborough	Lawrence/Kennedy	8227	2	8	16	27	47	77	20.6	130	69.7	59
34020	North York	Hendon Ave (Yonge/Finch)	8542	3	11	20	30	44	72	22.0	112	59.4	34
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	7827	2	7	17	27	44	74	20.2	134	77.4	37
35033	Etobicoke	Evans/Arnold Av	8494	2	6	14	24	43	75	18.4	99	56.8	53
36030	York	Clearview Heights	8637	2	7	16	26	45	73	19.9	140	57.8	41
44008	Burlington	Hwy2/North Shore Blvd E	8015	3	11	20	30	44	70	22.5	104	60.1	12
44015	Oakville	Bronte Rd/Woburn Cres	8700	1	9	20	30	46	72	21.8	109	58.0	36
45025	Oshawa	Ps Ritson Rd/Olive Av	8609	3	13	22	31	43	68	23.1	105	53.1	23
46110	Mississauga	Queensway W/Hurontario St	8186	2	8	17	27	46	76	20.8	110	63.2	57
48002	Stouffville	Hwy47/E of Hwy48	8445	10	22	30	39	53	81	31.4	131	74.3	95
49010	Dorset	Hwy 117/Paint Lake Rd	8516	12	23	30	37	49	70	30.6	108	61.5	27
51001	Ottawa	Med Gds, Rideau/Wurtemburg St	8387	2	11	17	25	37	60	19.1	95	62.1	3
52020	Kingston	Dalton Street	8455	1	10	20	28	43	71	21.5	105	71.7	35
56051	Cornwall	PM10 Memorial Pk Bedford/Third	8742	4	16	23	30	45	67	24.2	97	75.3	21

TABLE 12 Ozone (O_3) Statistics (1998)

Unit: parts per billion (ppb)

O_3 1-hour AAQC is 80 ppb

				PERCENTILE						Arith.	Maximum		# of times above Criterion
Stn #	City	Location	Valid h	10	30	50	70	90	99	Mean	1h	24h	1 h
59006	Peterborough	10 Hospital Drive	726	3	14	21	27	35	39	INS	40	34.1	0
62200	Fort Frances	Robert Moore PS	8726	12	22	27	33	42	56	27.3	78	56.0	0
63200	Thunder Bay	MTO 615 James St S	8541	3	14	22	29	37	52	21.5	69	50.2	0
71068	Sault Ste Marie	Wm. Merrifield School	8527	4	15	22	29	40	56	22.3	98	61.5	10
75010	North Bay	Dept. National Defence, Chippewa St	8578	7	19	26	34	47	70	27.4	95	68.9	23
77203	Sudbury	Science North	7485	12	21	27	34	48	71	29.1	103	64.8	26

TABLE 13 Inhalable Particles (PM_{10}) Statistics (1998)

Unit= micrograms/m^3

PM_{10} 24-hour interim AAQC is 50 micrograms/m^3

Staion Number	City	Location	Valid h	PERCENTILES 10	30	50	70	90	99	Mean	Maximum 1 h	24 h	# of times above Criterion
12016	Windsor	College/South St	8651	10.0	17.0	24.0	32.0	53.0	95.0	28.6	302	83	36
14064	Sarnia	Centennial Pk, Front St/Cn Tracks	8637	6.0	10.0	15.0	24.0	41.0	72.6	20.1	336	66	8
15025	London	900 Hightbury Ave.	8628	7.0	12.0	18.0	25.9	44.0	79.0	22.1	248	74	15
29025	Hamilton	Barton/Wentworth	2566	2.0	8.0	14.0	20.0	32.0	61.0	INS	530	61	1
29531	Hamilton	Ji Case	8010	8.0	20.0	33.0	51.0	99.0	276.9	48.1	874	258	136
29547	Hamilton	Pier 25	4259	6.0	16.0	26.0	40.0	77.0	208.0	INS	834	203	41
29561	Hamilton	Hamilton - Homeside	4782	8.0	14.0	20.0	29.0	47.0	92.0	INS	216	97	7
33003	Scarborough	Lawrence/Kennedy	8318	7.0	12.0	16.0	24.0	40.0	70.0	20.5	164	63	8
35003	Etobicoke	Elmcrest Rd (Centennial Pk)	7868	7.0	12.0	17.0	24.0	41.0	66.0	20.8	127	65	8
48002	Stouffville	Hwy47/E of Hwy48	8467	6.0	9.0	14.0	20.0	36.0	65.0	17.6	154	64	4
52020	Kingston	Dalton Street	8462	3.0	8.0	15.0	25.0	48.0	110.4	21.4	413	94	19
59006	Peterborough	10 Hospital Drive	728	4.0	7.0	9.0	12.0	18.0	27.7	INS	34	23	0
71068	Sault Ste Marie	Wm. Merrifield School	8494	4.0	8.0	12.0	20.0	38.0	99.0	18.3	288	75	9

Note: measurements made by TEOM sampler

TABLE 14 Respirable Particles ($PM_{2.5}$) Statistics (1998)

Unit= micrograms/m^3

Stn	City	Location	Valid h	PERCENTILES 10	30	50	70	90	99	Arith Mean	Maximum 1 h	24 h
18007	Tiverton	Concession Rd 2 Lot A	8631	5	7	9	13	23	45	11.7	110	51.9
22071	Simcoe	Experimental Farm	8130	4	7	10	14	27	48	12.7	73	47.5
26060	Kitchener	West Ave/Homewood	6048	8	13	17	22	37	60	INS	85	60.3
27067	St Catharines	Argyle Cres (Pump Stn)	5990	6	10	15	21	36	57	INS	86	53.9
29000	Hamilton	Elgin/Kelly St	8082	5	8	12	18	32	56	15.6	114	67.3
29114	Hamilton	Vickers Rd/East 18Th St	7729	5	8	12	19	34	60	16.3	108	64.2
31103	Toronto	Bay/Grosvenor	8390	5	8	11	15	26	47	13.4	83	50.6
34020	North York	Hendon Ave (Yonge/Finch)	8465	4	7	9	14	26	47	12.6	96	45.0
35033	Etobicoke	Evans/Arnold Av	8459	5	8	11	16	27	49	14.2	150	46 8
45025	Oshawa	Ps Ritson Rd/Olive Av	8588	5	7	10	15	26	48	13.1	86	51.1
46110	Mississauga	Queensway W/Hurontario St	7979	5	7	10	14	24	43	12.6	147	41.1
51001	Ottawa	Mcd Gds, Rideau/Wurtemburg St	8484	4	6	8	11	19	39	9.9	60	46.6

Note: measurements made by TEOM sampler

TABLE 15 Total Suspended Particulate (TSP) Statistics (1998)

Unit= micrograms/cubic metre

TSP 24-hour AAQC is 120 micrograms/m^3

TSP 1-year AAQC is 60 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max.	Arith Mean	Geom Mean	# of Times Above Criterion 24h	1y
11001	St Marys	309 Thomas St	55	17.4	32.0	49.0	76.8	123.6	148.5	149.0	61.6	47.9	8	0
12007	Windsor	Wright/Water St	51	45.0	58.0	74.0	95.0	129.0	178.5	187.0	81.2	74.6	8	1
12008	Windsor	467 University Av W	46	36.5	49.5	64.0	85.0	101.0	189.3	246.0	69.3	62.7	1	1
12011	Windsor	Drouillard Rd/Richmond St	53	33.2	48.2	61.0	76.6	118.6	190.7	198.0	71.1	62.3	6	1
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	37.1	53.3	67.0	90.0	147.9	260.3	295.0	85.2	72.2	9	1
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	42.0	68.0	80.0	101.0	128.0	150.6	151.0	84.0	77.6	6	1
12016	Windsor	College/South St	58	38.1	52.2	65.5	83.9	114.0	191.7	198.0	73.6	66.4	6	1
12038	Windsor	2885 Howard Ave	54	50.0	66.7	94.0	113.5	155.0	193.4	195.0	97.4	88.5	15	1
12053	Amherstburg	415 Front St	55	31.4	40.2	50.0	70.4	90.8	112.9	128.0	56.6	52.1	1	0
12055	Amherstburg	Duff St (E End)	55	29.8	41.2	49.0	64.6	92.2	123.1	129.0	55.9	50.5	1	0
12058	Windsor	Columbus Centre	54	36.0	48.7	58.5	71.2	99.1	142.5	160.0	64.1	58.3	3	0
12060	Windsor	Brentwood Centre	48	32.7	52.1	71.0	79.8	107.2	187.4	225.0	70.6	61.9	4	1
12061	Amherstburg	City Yard	53	40.6	61.0	81.0	102.0	141.8	183.9	199.0	86.5	78.2	9	1
14016	Courtright	Hwy40 (OPP Lambton GS)	57	21.0	32.6	48.0	56.4	75.6	91.9	93.0	47.0	42.5	0	0
14030	Corunna	RR1 (W of House)	58	19.4	31.1	37.0	57.8	76.5	169.8	216.0	47.2	39.3	2	0
14151	Sarnia	David/Front St	53	23.2	35.0	47.0	62.0	87.2	116.5	117.0	52.5	46.0	0	0
15025	London	900 Hightbury Ave.	57	25.2	37.8	55.0	79.4	97.4	127.2	139.0	59.6	51.9	1	0
17014	Beachville	Cyanamide Rd (Gordon Prop)	55	24.0	38.2	54.0	66.4	104.2	203.4	259.0	60.6	51.7	3	0
17015	Beachville	26 Vine St (MOE Trailer)	55	29.8	49.2	59.0	76.2	100.4	142.2	146.0	65.1	58.7	4	0
17020	Ingersoll	Hwy 2 Rr 2 (J Spriel Prop)	50	37.8	63.4	70.0	97.3	136.6	177.9	198.0	81.5	73.1	7	1
17021	Embro	Oxford Cty Rd 6 (Hesston Farm)	49	44.0	62.2	90.0	137.2	200.2	235.2	251.0	106.3	91.4	16	1
17215	Beachville	26 Vine St (MOE Trailer)	53	40.8	64.6	75.0	91.2	114.6	166.8	173.0	79.3	72.1	4	1
17315	Beachville	26 Vine St (MOE Trailer)	53	23.2	37.2	44.0	53.4	73.6	85.0	86.0	46.5	42.9	0	0
22092	Nanticoke	Rainham Rd/Sandusk Rd	58	19.0	29.0	38.0	55.8	78.6	117.0	125.0	45.9	38.8	1	0
22904	Nanticoke	Walpole S Ps Sandusk Rd	51	21.0	30.0	40.0	58.0	79.0	118.5	138.0	46.6	40.3	1	0
22907	Nanticoke	Rainham Rd (Near Stelco Gate)	57	26.6	42.8	58.0	72.2	95.4	156.2	201.0	62.6	55.7	2	0
22964	Nanticoke	N 2 Km Nanticoke GS	47	15.6	24.0	32.0	46.4	63.4	84.7	87.0	37.9	32.8	0	0
26054	Elmira	18 Mill Street	16	29.0	38.0	46.5	50.0	79.5	113.2	118.0	INS	INS	INS	INS
26056	Elmira	Church/Duke St	19	28.0	34.8	38.0	46.6	62.8	72.5	73.0	INS	INS	INS	INS
27045	Welland	337 Alberta/Devon St	59	27.8	37.8	52.0	66.6	88.0	108.3	117.0	54.9	50.3	0	0
27052	Thorold	185 Queen St S	59	45.8	72.4	92.0	124.2	181.0	270.7	320.0	105.4	91.9	19	1
27055	Niagara Falls	Stp Grounds, Stanley Av , Niagara	53	33.8	51.0	67.0	105.4	140.4	177.7	199.0	80.1	69.6	13	1
27057	St Catharines	27 Plymouth Av	52	34.3	56.9	76.5	102.7	134.8	175.3	187.0	81.9	72.3	10	1
29000	Hamilton	Elgin/Kelly St	59	27.8	39.8	64.0	76.2	103.4	152.0	174.0	63.7	56.2	3	0
29009	Hamilton	Kenilworth	56	31.0	47.0	60.0	76.0	89.5	122.3	130.0	61.1	56.4	1	0
29011	Hamilton	Burlington/Leeds	60	49.0	70.7	92.0	120.6	147.2	197.6	210.0	97.6	88.8	18	1
29012	Hamilton	Burlington/Wellington	56	26.5	41.0	54.0	72.0	102.5	141.1	173.0	60.1	52.4	1	0
29025	Hamilton	Barton/Wentworth	58	34.5	53.5	75.0	95.7	120.1	184.8	199.0	76.7	68.1	6	1
29102	Hamilton	467 Beach Blvd	54	34.3	46	74.5	93.1	125.2	192.58	200.0	77.1	66.3	7	1

TABLE 15 Total Suspended Particulate (TSP) Statistics (1998)

Unit= micrograms/cubic metre

TSP 24-hour AAQC is 120 micrograms/m^3

TSP 1-year AAQC is 60 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max.	Arith Mean	Geom Mean	# of Times Above Criterion 24h	1y
29111	Greensville	Ofield Rd/Hwy 5	15	23.8	40.2	43.0	77.8	157.2	405.3	442.0	INS	INS	INS	INS
29113	Hamilton	Gertrude/Depew	53	49.2	84.0	111.0	143.4	184.6	273.6	298.0	116.7	102.0	24	1
29114	Hamilton	Vickers Rd/East 18Th St	51	24.0	35.0	55.0	67.0	84.0	114.0	119.0	55.0	49.2	0	0
29118	Hamilton	Main St W/Hwy403	59	21.8	32.0	50.0	60.8	81.0	119.1	151.0	51.3	45.1	1	0
29119	Hamilton	Morley St/Parkdale Av	59	41.4	61.0	81.0	95.2	118.8	216.5	260.0	83.2	75.2	6	1
29122	Hamilton	Dundurn/York	56	19.5	29.0	43.0	58.0	77.0	116.9	146.0	46.3	40.0	1	0
29143	Hamilton	Keefer Court (MOE Air Shop)	58	45.0	59.1	78.5	98.9	143.9	188.6	204.0	86.7	78.4	10	1
31045	Toronto	Bruce Ps 51 Larchmount Av	110	26.0	38.0	45.0	62.3	90.1	120.9	121.0	53.6	47.4	2	0
31058	Toronto	Mosley/Leslie Sts	17	34.6	43.6	48.0	52.2	70.8	80.4	82.0	INS	INS	INS	INS
31065	Toronto	633 Eastern Av	111	35.0	51.0	65.0	86.0	115.0	174.6	177.0	71.5	64.4	10	1
31082	Toronto	Works Dept , 138 Hamilton Av	118	33.7	49.0	59.5	81.9	109.3	174.0	239.0	69.0	61.5	9	1
46047	Mississauga	Mississauga Rd S/Port St	55	27.6	49.4	68.0	83.8	111.8	170.6	190.0	70.9	62.1	5	1
46117	Mississauga	Meadow Pk, Apple Lane Club	53	23.0	28.6	38.0	51.0	74.4	94.1	105.0	43.2	38.6	0	0
63046	Thunder Bay	Bombardier Montreal St	57	13.0	34.0	41.0	54.4	69.4	107.7	129.0	44.5	37.6	1	0
71042	Sault Ste Marie	Pumphouse, Bonney St	56	38.0	51.0	92.0	123.5	182.5	241.9	249.0	100.3	81.8	18	1
72114	Hearst	George/6th St.	51	22.0	41.0	86.0	125.0	226.0	371.0	392.0	104.3	73.3	17	1
75048	Cobalt	St Patrick School	46	8.5	18.0	24.0	31.5	43.5	67.4	76.0	25.8	21.8	0	0

TABLE 16 Lead (Pb) in TSP Statistics (1998)

Unit = micrograms/m^3

Pb 24-hour AAQC is 2.0 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean	# of times Above Criterion 24 h
12007	Windsor	Wright/Water St	51	0.005	0.005	0.005	0.005	0.030	0.055	0.080	0.011	0.007	0
12008	Windsor	467 University Av W	46	0.005	0.005	0.005	0.020	0.035	0.060	0.060	0.016	0.011	0
12011	Windsor	Drouillard Rd/Richmond St	53	0.005	0.005	0.020	0.030	0.030	0.054	0.070	0.017	0.012	0
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	0.005	0.005	0.020	0.030	0.040	0.080	0.100	0.021	0.014	0
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	0.005	0.005	0.005	0.020	0.030	0.050	0.050	0.015	0.010	0
12016	Windsor	College/South St	58	0.005	0.005	0.005	0.020	0.033	0.099	0.150	0.018	0.011	0
12038	Windsor	2885 Howard Av	54	0.005	0.005	0.030	0.040	0.080	0.148	0.190	0.034	0.020	0
12058	Windsor	Columbus Centre	54	0.005	0.005	0.020	0.020	0.037	0.064	0.080	0.017	0.012	0
12060	Windsor	Brentwood Centre	48	0.005	0.005	0.020	0.020	0.040	0.098	0.140	0.020	0.013	0
12061	Amherstburg	City Yard	53	0.005	0.005	0.005	0.020	0.028	0.590	0.970	0.035	0.011	0
14016	Courtright	Hwy40 (OPP Lambton GS)	57	0.005	0.005	0.005	0.020	0.020	0.030	0.030	0.012	0.009	0
14030	Corunna	RR1 (W of House)	58	0.005	0.005	0.005	0.005	0.023	0.049	0.060	0.011	0.008	0
15025	London	900 Hightbury Ave.	57	0.005	0.005	0.005	0.020	0.030	0.044	0.050	0.014	0.010	0
26054	Elmira	Church/Duke St	19	0.005	0.005	0.005	0.020	0.032	0.245	0.290	INS	INS	0
27052	Thorold	185 Queen St S	59	0.005	0.005	0.005	0.014	0.022	0.048	0.060	0.011	0.008	0
27057	St Catharines	27 Plymouth Av	52	0.005	0.005	0.005	0.020	0.030	0.040	0.040	0.013	0.010	0
29011	Hamilton	Burlington/Leeds	60	0.005	0.005	0.025	0.040	0.060	0.074	0.080	0.029	0.019	0
29025	Hamilton	Barton/Wentworth	58	0.005	0.005	0.020	0.030	0.053	0.124	0.170	0.026	0.016	0
29102	Hamilton	467 Beach Blvd	54	0.005	0.020	0.020	0.031	0.050	0.095	0.100	0.028	0.020	0
29114	Hamilton	Vickers Rd/East 18Th St	48	0.005	0.005	0.005	0.020	0.030	0.061	0.080	0.013	0.009	0
31045	Toronto	Bruce Ps 51 Larchmount Av	110	0.005	0.005	0.005	0.020	0.050	0.119	0.160	0.020	0.011	0
31058	Toronto	Mosley/Leslie Sts	17	0.005	0.020	0.030	0.040	0.118	0.222	0.240	INS	INS	0
31065	Toronto	633 Eastern Av	111	0.005	0.020	0.030	0.060	0.160	0.930	1.600	0.083	0.033	0
31082	Toronto	Works Dept , 138 Hamilton Av	118	0.005	0.005	0.005	0.020	0.040	0.070	0.080	0.016	0.010	0
46047	Mississauga	Mississauga Rd S/Port St	55	0.298	0.482	1.000	1.680	4.220	10.352	11.000	1.804	1.005	13
46117	Mississauga	Meadow Pk, Apple Lane Club	53	0.005	0.005	0.005	0.020	0.020	0.035	0.040	0.012	0.009	0
71042	Sault Ste Marie	Pumphouse, Bonney St	56	0.005	0.005	0.005	0.005	0.013	0.184	0.310	0.014	0.006	0
75048	Cobalt	St Patrick School	46	0.005	0.005	0.005	0.005	0.025	0.046	0.050	0.010	0.007	0

TABLE 17 Iron (Fe) in TSP Statistics (1998)

Unit: micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith. Mean	Geom Mean
12007	Windsor	Wright/Water St	51	0.70	1.10	1.50	2.10	3.30	4.95	5 60	1.80	1.51
12008	Windsor	467 University Av W	46	0.40	0.65	0.90	1.05	2.00	3.17	3.80	1.04	0.85
12011	Windsor	Drouillard Rd/Richmond St	53	0.42	0.76	1.00	1.30	2.10	5.71	6.70	1.25	0.96
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	0.40	0.80	1.30	2.48	5.68	15.43	19 00	2.57	1.40
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	0 50	1.00	1.20	1.70	2.30	3 00	3.20	1.40	1.21
12016	Windsor	College/South St	58	0.40	0.71	1.25	1.79	2.43	3 67	3.90	1.34	1.08
12038	Windsor	2885 Howard Av	54	1.10	1.59	3.95	5.92	10.70	16 88	19.00	4.92	3 46
12058	Windsor	Columbus Centre	54	0 40	0.70	1.00	1.30	2.24	2.98	3 30	1.14	0.93
12060	Windsor	Brentwood Centre	48	0 30	0.81	1.25	1.40	2.30	4.07	5.10	1.26	1.00
12061	Amherstburg	City Yard	53	0.54	1.00	1.30	1.74	2.58	4 80	4 90	1.50	1.22
14016	Courtright	Hwy40 (OPP Lambton GS)	57	0.05	0.20	0.30	0 40	0.70	0.94	1.00	0.33	0.23
14030	Corunna	RR1 (W of House)	58	0 05	0 06	0 25	0 30	0.80	2.36	3 50	0.38	0.21
15025	London	900 Hightbury Ave.	57	0.05	0.20	0.40	0.70	0.84	1.43	1.60	0.46	0.31
26054	Elmira	18 Mill Street	16	0 25	0.40	0.55	0 80	2.40	4 59	4.90	INS	INS
26056	Elmira	Church/Duke St	19	0.20	0.30	0.40	0.50	0.64	0 80	0.80	INS	INS
27052	Thorold	185 Queen St S	59	0 50	0 70	1.00	1.56	2 66	4 71	5.70	1.38	1 06
27057	St Catharines	27 Plymouth Av	52	0.50	0 63	1.05	1.94	3 68	6.10	6 20	1.68	1.21
29011	Hamilton	Burlington/Leeds	59	2.16	2.74	4.40	5 28	7.60	10.13	11.00	4.51	3.96
29025	Hamilton	Barton/Wentworth	57	0.66	1.20	1.60	3.28	5.54	12.76	15.00	2.78	1.88
29102	Hamilton	467 Beach Blvd	54	0.40	0.79	2.20	3 60	5.28	7.88	8.30	2.51	1.59
29114	Hamilton	Vickers Rd/East 18Th St	48	0 20	0 40	0.55	1 35	2.43	5.74	6.40	1.13	0 69
31058	Toronto	Mosley/Leslie Sts	17	0.20	0.38	0 50	0 62	0.84	1.40	1.50	INS	INS
46117	Mississauga	Meadow Pk, Apple Lane Club	48	0.1	0 2	0.3	0 4	0.5	0.75	0 80	0.32	0 24
71042	Sault Ste Marie	Pumphouse, Bonney St	56	0.7	1.5	3.4	7.3	14 5	26 75	35.0	5.95	3.19
75048	Cobalt	St Patrick School	46	0.1	0.1	0.2	0 3	0.6	0 91	1.0	0.26	0 16

TABLE 18 Manganese (Mn) in TSP Statistics (1998)

Unit = micrograms/m^3

Mn 24-hour AAQC is 2.5 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean	# of times Above Criterion 24 h
12007	Windsor	Wright/Water St	51	0.019	0.032	0.046	0.059	0.086	0.125	0.130	0.051	0.043	0
12008	Windsor	467 University Av W	46	0.013	0.024	0.030	0.039	0.062	0.197	0.300	0.038	0.029	0
12011	Windsor	Drouillard Rd/Richmond St	52	0.015	0.025	0.033	0.048	0.092	0.377	0.540	0.055	0.037	0
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	0.014	0.027	0.048	0.117	0.273	0.752	0.910	0.117	0.055	0
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	0.017	0.029	0.040	0.051	0.064	0.108	0.120	0.042	0.037	0
12016	Windsor	College/South St	58	0.015	0.024	0.038	0.056	0.071	0.100	0.100	0.043	0.035	0
12038	Windsor	2885 Howard Av	54	0.024	0.039	0.071	0.101	0.160	0.244	0.260	0.082	0.062	0
12058	Windsor	Columbus Centre	54	0.011	0.020	0.027	0.039	0.058	0.074	0.077	0.032	0.027	0
12060	Windsor	Brentwood Centre	48	0.011	0.023	0.030	0.044	0.063	0.128	0.170	0.036	0.027	0
12061	Amherstburg	City Yard	53	0.016	0.027	0.032	0.049	0.064	0.117	0.140	0.040	0.034	0
14016	Courtright	Hwy40 (OPP Lambton GS)	57	0.002	0.004	0.006	0.010	0.017	0.021	0.022	0.008	0.006	0
14030	Corunna	RR1 (W of House)	58	0.001	0.003	0.007	0.011	0.020	0.042	0.043	0.010	0.006	0
15025	London	900 Hightbury Ave.	56	0.005	0.009	0.014	0.022	0.030	0.059	0.065	0.018	0.013	0
26054	Elmira	18 Mill Street	16	0.009	0.014	0.019	0.026	0.063	0.249	0.280	INS	INS	0
26056	Elmira	Church/Duke St	19	0.007	0.011	0.022	0.031	0.042	0.054	0.056	INS	INS	0
27052	Thorold	185 Queen St S	58	0.020	0.028	0.040	0.073	0.113	0.209	0.220	0.058	0.045	0
27057	St Catharines	27 Plymouth Av	52	0.027	0.049	0.070	0.124	0.278	0.354	0.390	0.115	0.080	0
29011	Hamilton	Burlington/Leeds	59	0.160	0.210	0.290	0.386	0.504	0.914	1.100	0.326	0.283	0
29025	Hamilton	Barton/Wentworth	57	0.054	0.082	0.130	0.220	0.384	0.902	1.300	0.190	0.135	0
29102	Hamilton	467 Beach Blvd	54	0.023	0.055	0.115	0.182	0.331	0.435	0.440	0.145	0.092	0
29114	Hamilton	Vickers Rd/East 18Th St	47	0.013	0.018	0.026	0.061	0.148	0.373	0.470	0.063	0.035	0
31058	Toronto	Mosley/Leslie Sts	17	0.008	0.018	0.022	0.024	0.036	0.067	0.072	INS	INS	0
46117	Mississauga	Meadow Pk, Apple Lane Club	48	0.003	0.008	0.012	0.017	0.026	0.030	0.030	0.013	0.010	0
71042	Sault Ste Marie	Pumphouse, Bonney St	56	0.061	0.110	0.275	0.420	0.695	1.190	1.300	0.328	0.210	0
75048	Cobalt	St Patrick School	46	0.001	0.002	0.004	0.008	0.012	0.015	0.016	0.006	0.004	0

TABLE 19 Nickel (Ni) in TSP Statistics (1998)

Unit = micrograms/m^3

Ni 24-hour AAQC is 2.0 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean	# of times Above Criterion 24 h
12007	Windsor	Wright/Water St	51	0.001	0.001	0.001	0.002	0.005	0.020	0.030	0.003	0.002	0
12008	Windsor	467 University Av W	46	0.001	0.001	0.001	0.003	0.007	0.013	0.015	0.003	0.002	0
12011	Windsor	Drouillard Rd/Richmond St	53	0.001	0.001	0.001	0.001	0.004	0.015	0.022	0.002	0.001	0
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	0.001	0.001	0.002	0.005	0.008	0.019	0.025	0.004	0.002	0
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	0.001	0.001	0.001	0.002	0.007	0.019	0.026	0.003	0.002	0
12016	Windsor	College/South St	58	0.001	0.001	0.001	0.004	0.006	0.012	0.014	0.003	0.002	0
12038	Windsor	2885 Howard Av	54	0.001	0.001	0.005	0.008	0.013	0.025	0.027	0.006	0.004	0
12058	Windsor	Columbus Centre	54	0.001	0.001	0.002	0.003	0.007	0.014	0.017	0.003	0.002	0
12060	Windsor	Brentwood Centre	48	0.001	0.001	0.004	0.006	0.012	0.041	0.041	0.006	0.003	0
12061	Amherstburg	City Yard	53	0.001	0.001	0.002	0.003	0.007	0.019	0.027	0.003	0.002	0
14016	Courtright	Hwy40 (OPP Lambton GS)	57	0.001	0.001	0.001	0.002	0.013	0.030	0.033	0.004	0.002	0
14030	Corunna	Rr1 (W of House)	58	0.001	0.001	0.001	0.001	0.004	0.010	0.012	0.002	0.001	0
15025	London	900 Hightbury Ave.	57	0.001	0.001	0.001	0.002	0.003	0.006	0.007	0.002	0.001	0
26054	Elmira	18 Mill Street	16	0.001	0.001	0.001	0.001	0.002	0.004	0.004	INS	INS	0
26056	Elmira	Church/Duke St	19	0.001	0.001	0.001	0.001	0.001	0.001	0.001	INS	INS	0
27052	Thorold	185 Queen St S	59	0.001	0.001	0.001	0.003	0.009	0.063	0.120	0.006	0.002	0
27057	St Catharines	27 Plymouth Av	52	0.001	0.001	0.001	0.003	0.006	0.014	0.019	0.003	0.002	0
29011	Hamilton	Burlington/Leeds	60	0.001	0.001	0.005	0.009	0.012	0.053	0.086	0.007	0.004	0
29025	Hamilton	Barton/Wentworth	58	0.001	0.001	0.003	0.006	0.019	0.037	0.043	0.007	0.003	0
29102	Hamilton	467 Beach Blvd	54	0.001	0.001	0.002	0.004	0.008	0.014	0.017	0.003	0.002	0
29114	Hamilton	Vickers Rd/East 18Th St	48	0.001	0.001	0.001	0.002	0.006	0.009	0.011	0.002	0.002	0
31058	Toronto	Mosley/Leslie Sts	17	0.001	0.002	0.002	0.004	0.004	0.006	0.006	INS	INS	0
46117	Mississauga	Meadow Pk, Apple Lane Club	48	0.001	0.001	0.001	0.001	0.003	0.005	0.005	0.002	0.001	0
71042	Sault Ste Marie	Pumphouse, Bonney St	56	0.001	0.001	0.001	0.003	0.008	0.011	0.013	0.003	0.002	0
75048	Cobalt	St Patrick School	46	0.001	0.001	0.001	0.001	0.004	0.009	0.009	0.002	0.001	0

TABLE 20 Chromium (Cr) in TSP Statistics (1998)

Units = micrograms/m^3

Cr 24-hour AAQC is 1.5 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith. Mean	Geom Mean	Above Criterion 24 h
12007	Windsor	Wright/Water St	51	0.001	0.004	0.006	0.010	0.014	0.019	0.019	0.007	0.005	0
12008	Windsor	467 University Av W	46	0.001	0.003	0.005	0.006	0.012	0.017	0.020	0.006	0.004	0
12011	Windsor	Drouillard Rd/Richmond St	53	0.001	0.003	0.006	0.007	0.013	0.036	0.042	0.007	0.005	0
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	0.001	0.003	0.007	0.013	0.032	0.086	0.100	0.014	0.007	0
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	0.002	0.006	0.008	0.010	0.012	0.017	0.018	0.008	0.006	0
12016	Windsor	College/South St	58	0.001	0.004	0.006	0.008	0.013	0.021	0.024	0.007	0.005	0
12038	Windsor	2885 Howard Av	54	0.005	0.011	0.018	0.029	0.050	0.087	0.093	0.024	0.017	0
12058	Windsor	Columbus Centre	54	0.002	0.003	0.005	0.007	0.013	0.017	0.019	0.006	0.005	0
12060	Windsor	Brentwood Centre	48	0.001	0.003	0.006	0.008	0.012	0.022	0.025	0.007	0.005	0
12061	Amherstburg	City Yard	53	0.001	0.004	0.006	0.010	0.014	0.033	0.036	0.008	0.005	0
14016	Courtright	Hwy40 (OPP Lambton GS)	57	0.001	0.001	0.002	0.002	0.004	0.006	0.007	0.002	0.002	0
14030	Corunna	RR1 (W of House)	58	0.001	0.001	0.001	0.003	0.007	0.021	0.022	0.003	0.002	0
15025	London	900 Hightbury Ave	57	0.001	0.002	0.004	0.005	0.007	0.012	0.012	0.004	0.003	0
26054	Elmira	18 Mill Street	16	0.001	0.001	0.001	0.001	0.005	0.018	0.020	INS	INS	0
26056	Elmira	Church/Duke St	19	0.001	0.001	0.001	0.001	0.001	0.002	0.002	INS	INS	0
27052	Thorold	185 Queen St S	59	0.017	0.059	0.085	0.206	0.664	2.876	4.500	0.285	0.107	2
27057	St Catharines	27 Plymouth Av	52	0.001	0.003	0.008	0.014	0.024	0.030	0.033	0.010	0.006	0
29011	Hamilton	Burlington Leeds	59	0.020	0.032	0.041	0.060	0.080	0.208	0.260	0.050	0.041	0
29025	Hamilton	Barton/Wentworth	58	0.004	0.012	0.021	0.035	0.060	0.774	1.600	0.055	0.018	1
29102	Hamilton	467 Beach Blvd	54	0.002	0.007	0.014	0.021	0.038	0.049	0.051	0.017	0.011	0
29114	Hamilton	Vickers Rd/East 18Th St	48	0.001	0.001	0.002	0.006	0.020	0.172	0.280	0.013	0.003	0
31058	Toronto	Mosley/Leslie Sts	17	0.003	0.005	0.006	0.006	0.009	0.010	0.010	INS	INS	0
46117	Mississauga	Meadow Pk, Apple Lane Club	48	0.001	0.001	0.001	0.001	0.003	0.008	0.009	0.002	0.001	0
71042	Sault Ste Marie	Pumphouse, Bonney St	56	0.004	0.009	0.014	0.030	0.045	0.091	0.120	0.022	0.014	0
75048	Cobalt	St Patrick School	46	0.001	0.001	0.002	0.003	0.005	0.007	0.007	0.002	0.002	0

TABLE 21 Vanadium (V) in TSP Statistics (1998)

Unit = micrograms/m^3

V 24-hour AAQC is 2.0 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean	# of times above Criterion 24 h
12007	Windsor	Wright/Water St	51	0.001	0.003	0.008	0.012	0.021	0.054	0.075	0.011	0.006	0
12008	Windsor	467 University Av W	46	0.001	0.002	0.007	0.011	0.017	0.033	0.039	0.008	0.005	0
12011	Windsor	Drouillard Rd/Richmond St	53	0.001	0.001	0.003	0.007	0.018	0.039	0.050	0.007	0.003	0
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	0.001	0.001	0.004	0.013	0.024	0.051	0.056	0.010	0.004	0
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	0.001	0.001	0.003	0.012	0.015	0.050	0.066	0.008	0.004	0
12016	Windsor	College/South St	58	0.001	0.001	0.004	0.009	0.015	0.039	0.059	0.007	0.004	0
12038	Windsor	2885 Howard Av	54	0.001	0.004	0.011	0.019	0.030	0.047	0.049	0.014	0.008	0
12058	Windsor	Columbus Centre	54	0.001	0.002	0.004	0.008	0.012	0.031	0.034	0.006	0.004	0
12060	Windsor	Brentwood Centre	48	0.001	0.001	0.004	0.009	0.019	0.034	0.040	0.007	0.004	0
12061	Amherstburg	City Yard	53	0.001	0.003	0.006	0.010	0.015	0.031	0.044	0.007	0.005	0
14016	Courtright	Hwy40 (OPP Lambton GS)	57	0.001	0.001	0.004	0.009	0.032	0.083	0.091	0.011	0.004	0
14030	Corunna	Rr1 (W of House)	58	0.001	0.001	0.002	0.005	0.012	0.023	0.024	0.005	0.003	0
15025	London	900 Hightbury Ave.	57	0.001	0.001	0.001	0.002	0.007	0.011	0.011	0.003	0.002	0
26054	Elmira	18 Mill Street	16	0.001	0.005	0.006	0.008	0.010	0.024	0.027	INS	INS	0
26056	Elmira	Church/Duke St	19	0.001	0.003	0.005	0.008	0.010	0.011	0.011	INS	INS	0
27052	Thorold	185 Queen St S	59	0.001	0.006	0.013	0.031	0.061	0.201	0.370	0.027	0.011	0
27057	St Catharines	27 Plymouth Av	52	0.001	0.001	0.003	0.006	0.010	0.057	0.098	0.006	0.003	0
29011	Hamilton	Burlington/Leeds	60	0.001	0.007	0.014	0.016	0.034	0.039	0.043	0.015	0.010	0
29025	Hamilton	Barton/Wentworth	58	0.001	0.002	0.007	0.010	0.018	0.057	0.062	0.009	0.005	0
29102	Hamilton	467 Beach Blvd	54	0.001	0.001	0.004	0.011	0.021	0.034	0.042	0.008	0.004	0
29114	Hamilton	Vickers Rd/East 18Th St	48	0.001	0.001	0.001	0.001	0.007	0.019	0.020	0.003	0.002	0
31058	Toronto	Mosley/Leslie Sts	17	0.001	0.001	0.003	0.004	0.007	0.008	0.008	INS	INS	0
46117	Mississauga	Meadow Pk, Apple Lane Club	48	0.001	0.001	0.002	0.006	0.010	0.012	0.012	0.004	0.003	0
71042	Sault Ste Marie	Pumphouse, Bonney St	56	0.001	0.006	0.010	0.021	0.033	0.057	0.067	0.015	0.008	0
75048	Cobalt	St Patrick School	46	0.001	0.001	0.001	0.001	0.002	0.005	0.006	0.001	0.001	0

TABLE 22 Copper (Cu) in TSP Statistics (1998)

Unit = micrograms/m^3

Cu 24-hour AAQC is 50 micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10	30	50	70	90	99	Max	Arith Mean	Geom Mean	# of times Above Criterion 24 h
12007	Windsor	Wright/Water St	50	0.01	0.02	0.04	0.04	0.08	0.26	0.42	0.05	0.03	0
12008	Windsor	467 University Av W	46	0.01	0.01	0.01	0.02	0.03	0.05	0.05	0.01	0.01	0
12011	Windsor	Drouillard Rd/Richmond St	53	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.02	0.01	0
12013	Windsor	Filtrat Plt 3665 Wyandotte St E	52	0.01	0.01	0.02	0.02	0.03	0.07	0.07	0.02	0.01	0
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	0.01	0.01	0.01	0.02	0.03	0.04	0.04	0.01	0.01	0
12016	Windsor	College/South St	58	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.01	0.01	0
12038	Windsor	2885 Howard Av	53	0.04	0.06	0.07	0.10	0.17	0.94	1.40	0.13	0.08	0
12058	Windsor	Columbus Centre	53	0.01	0.03	0.04	0.05	0.13	0.24	0.24	0.06	0.04	0
12060	Windsor	Brentwood Centre	48	0.01	0.01	0.02	0.02	0.04	0.06	0.07	0.02	0.02	0
12061	Amherstburg	City Yard	53	0.01	0.01	0.02	0.02	0.04	0.06	0.07	0.02	0.01	0
14016	Courtright	Hwy40 (OPP Lambton GS)	56	0.03	0.07	0.10	0.15	0.22	0.37	0.42	0.12	0.08	0
14030	Corunna	RR1 (W of House)	58	0.01	0.01	0.02	0.02	0.07	0.18	0.31	0.03	0.02	0
15025	London	900 Hightbury Ave	56	0.12	0.31	0.65	0.87	1.45	2.36	2.80	0.71	0.50	0
26054	Elmira	18 Mill Street	15	0.05	0.06	0.08	0.10	0.13	0.16	0.16	INS	INS	0
26056	Elmira	Church/Duke St	18	0.04	0.05	0.07	0.08	0.12	0.16	0.17	INS	INS	0
27052	Thorold	185 Queen St S	59	0.04	0.08	0.14	0.22	0.32	0.52	0.60	0.17	0.11	0
27057	St Catharines	27 Plymouth Av	51	0.14	0.18	0.22	0.25	0.34	0.49	0.50	0.23	0.22	0
29011	Hamilton	Burlington/Leeds	59	0.06	0.07	0.09	0.11	0.13	0.15	0.15	0.09	0.08	0
29025	Hamilton	Barton/Wentworth	57	0.07	0.10	0.14	0.18	0.21	0.25	0.26	0.14	0.12	0
29102	Hamilton	467 Beach Blvd	53	0.05	0.08	0.09	0.11	0.13	0.15	0.16	0.09	0.09	0
29114	Hamilton	Vickers Rd/East 18Th St	48	0.01	0.02	0.03	0.04	0.07	0.08	0.08	0.03	0.03	0
31058	Toronto	Mosley/Leslie Sts	17	0.07	0.10	0.11	0.13	0.16	0.20	0.21	INS	INS	0
46117	Mississauga	Meadow Pk, Apple Lane Club	48	0.12	0.16	0.17	0.21	0.25	0.29	0.29	0.18	0.17	0
71042	Sault Ste Marie	Pumphouse, Bonney St	56	0.05	0.10	0.13	0.15	0.22	0.31	0.35	0.13	0.11	0
75048	Cobalt	St Patrick School	46	0.01	0.01	0.01	0.01	0.02	0.04	0.04	0.01	0.01	0

TABLE 23 Nitrate (NO_3^-) in TSP Statistics (1998)

Unit = micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean
12007	Windsor	Wright/Water St	51	1.8	3.4	5.2	6.8	9.9	12.9	13.9	5.5	4.6
12008	Windsor	467 University Av W	46	2.1	3.8	5.2	8.0	11.1	14.8	14.9	6.1	5.1
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	1.5	4.0	5.1	7.6	9.7	13.5	14.0	5.8	4.8
12016	Windsor	College/South St	58	1.8	3.5	4.8	6.9	9.8	12.5	12.7	5.4	4.5
12038	Windsor	2885 Howard Av	54	1.7	3.8	4.9	7.0	10.9	13.8	15.0	5.8	4.8
12053	Amherstburg	415 Front St	46	2.4	3.9	5.3	7.9	11.3	14.1	14.6	6.2	5.2
12058	Windsor	Columbus Centre	54	1.7	3.6	4.6	6.1	9.0	13.6	15.3	5.3	4.5
14016	Courtright	Hwy40 (OPP Lambton GS)	57	1.2	2.7	4.6	5.9	9.2	14.0	15.6	4.9	3.9
22904	Nanticoke	Walpole South PS, Sandusk Rd	53	1.6	3.8	6.1	7.8	10.0	18.0	19.0	6.2	5.0
29011	Hamilton	Burlington/Leeds	60	1.1	2.4	3.6	4.9	8.6	11.2	12.6	4.2	3.4
29025	Hamilton	Barton/Wentworth	58	1.3	2.8	4.7	6.3	9.8	13.9	17.1	5.2	4.1
29102	Hamilton	467 Beach Blvd	54	1.3	2.9	4.3	5.8	8.9	13.1	14.2	4.7	3.8
29114	Hamilton	Vickers Rd/East 18Th St	48	1.3	2.7	4.4	5.9	7.8	11.3	11.3	4.6	3.8

TABLE 24 Sulphate (SO_4^{2-}) in TSP Statistics (1998)

Unit =micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean
12008	Windsor	467 University Av W	46	8.8	11.8	13.6	17.2	22.0	24.4	24.8	15.0	14.2
12015	Windsor	Sewage Stn Hwy 18/Prospect	41	11.5	13.0	14.7	17.1	22.9	26.2	26.7	16.0	15.4
12053	Amherstburg	415 Front St	46	8.8	12.1	13.3	16.2	20.3	25.8	25.9	14.5	13.8
14016	Courtright	Hwy40 (OPP Lambton GS)	57	7.6	11.6	14.4	15.2	18.2	21.3	21.4	13.4	12.7
29114	Hamilton	Vickers Rd/East 18Th St	48	7.5	10.6	12.8	14.8	19.9	26.6	29.0	13.3	12.4
12007	Windsor	Wright/Water St	51	12.0	13.3	14.6	16.6	20.5	24.5	26.1	15.4	15.0
12038	Windsor	2885 Howard Av	53	8.4	12.1	13.8	15.7	20.3	25.3	26.4	14.2	13.3
22904	Nanticoke	Walpole South PS, Sandusk Rd	53	6.7	11.7	13.7	18.1	22.8	29.0	30.5	14.8	13.4
12058	Windsor	Columbus Centre	54	8.1	12.1	13.1	14.6	17.9	22.1	22.6	13.4	12.8
29102	Hamilton	467 Beach Blvd	54	8.2	12.5	15.3	17.9	23.0	32.9	34.1	15.3	14.0
12016	Windsor	College/South St	58	10.3	12.7	13.4	16.1	21.3	22.9	23.1	14.6	14.1
29028	Hamilton	Barton/Wentworth	58	8.0	10.2	13.7	17.6	23.7	33.8	38.4	15.1	13.7
29011	Hamilton	Burlington/Leeds	60	9.1	11.2	14.0	17.4	22.9	27.0	28.1	15.0	14.0

TABLE 25 Inhalable Particles (PM_{10}) 24-Hour Statistics (1998)

Unit =micrograms/m^3

24h PM_{10} Interim AAQC is 50 ug/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max.	Arith Mean	Geom Mean	% of days >50
12507	Windsor Wright	PM10 Wright/Water St	49	15.8	24 0	31 0	42 6	54 2	103 2	133 0	35 4	30 8	14 3
12508	Windsor University	PM10 467 University Ave W	46	15.0	18 0	25 0	31.5	46 0	59.9	63.0	27 3	24 8	8 7
12513	Windsor Wyndotte	PM10 3665 Wyndotte St E	53	12 0	17.0	25 0	38 4	64 2	105 1	116 0	32 4	26 0	17.0
14550	Sarnia Centenial	PM10 6th Line, Moore TWP	56	6 0	9.0	13 0	20 5	33 0	47 4	54 0	16 6	13 0	1 8
14564	Sarnia	PM10 Centenial Park/ Front St	56	8 0	12 5	16 0	25 0	43 0	60 8	69 0	21 6	17 7	3 6
15525	London	PM10 900 Highbury Ave. E	59	9.8	13.4	20 0	31.0	40 6	54 6	65 0	23 2	19 7	1 7
17550	Embro	PM10 Earl Lantz property	18	6.7	8.4	14.5	24 9	42 6	45 7	46 0	INS	INS	0 0
22304	Nanticoke	PM10 Walpole PS, Sandusk Rd	60	8 0	10.0	15.5	22.3	37.1	44 4	45.0	19 0	16 0	0 0
26365	Elmira	PM10 18 Mill St	10	11.6	13.4	15.5	24 3	49 0	73 3	76 0	INS	INS	10 0
27308	St Catharines	PM10 71 King Street	59	11.8	16 0	23.0	31 6	42 8	55 3	64 0	25 0	22 0	1 7
27352	Thorold	PM10 185 Queen St S	54	13 6	24 0	33.5	50 1	77 6	115 7	139 0	40 5	33 3	29 6
29300	Hamilton Dtn	PM10 Elgin/Kelly St	59	7.8	14.4	27.0	34 6	42.2	72 0	79.0	26 2	21 4	3 4
29302	Hamilton Beach Blvd	PM10 467 Beach Blvd	57	10 0	14 0	24 0	35 4	52 0	70 4	71 0	28 0	22 9	14 0
29313	Hamilton	PM10 Gertrude/Depew	52	14 1	26.3	40 0	54 8	83 6	113 9	121.0	44 6	37 2	36 5
29324	Hamilton Mtn	PM10 Buchanan Park PS	56	8 0	14 0	23 5	30 0	39 5	50 4	52 0	23 1	19 6	1 8
31127	Toronto Dtn	PM10 Bay/Grosvenor St	60	10 9	14.7	17 1	31.0	44 1	62 5	74 4	23 8	20 4	5 0
35127	Etobicoke South	PM10 Evans/Arnold	59	13 0	18 4	23 0	30 6	41 4	51 9	56 0	25 6	23 2	1 7
44127	Oakville	PM10 Bronte Rd/Woburn Cr	55	10 0	14.0	20 0	26 8	41.0	65 8	75 0	22 8	19 5	3 6
46127	Mississauga	PM10 Meadwood Park	59	8 8	12.4	14 0	23 6	38 0	52 9	57 0	19 7	16 8	1 7
56051	Cornwall	PM10 Memorial Pk Bedford/Third	30	13 6	17.7	25.0	33 3	44 6	61.1	64 0	INS	INS	6 7
62135	Fort Frances	PM10 Legion 250 Church	52	6.1	10.0	13 0	20 7	34 4	55 4	60 0	17 6	14 3	3 8
63201	Thunder Bay	PM10 615 James St S	60	6 0	11 0	15 0	20 0	27.1	42 1	48 0	16 3	14 3	0 0
71342	Sault Ste Marie	PM10 Bonney St	54	7.9	17.8	28 0	42 2	64 7	83 4	85 0	33 8	25 9	24 1
71368	Sault Ste Marie	PM10 Wm Merrifield School	59	6 0	12.0	19 0	23 0	31 6	69 4	70 0	19 7	16 0	3 4
77326	Sudbury	PM10 19 Lisgar St	31	10 0	12.0	19 0	24 0	38 0	40 7	41 0	INS	INS	0 0
77570	Copper Cliff	PM10 Market St	55	7 0	9 0	13 0	18 0	36 6	62 9	64 0	17 9	14 1	5 5

TABLE 26 Copper (Cu) in PM_{10} Statistics (1998)

Unit = micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10	30	50	70	90	99	Max	Arith Mean	Geom Mean
12507	Windsor	PM10 Wright/Water St	50	0.005	0.005	0.005	0.005	0.020	0 020	0 020	0 007	0 006
12508	Windsor	PM10 467 University Ave W	46	0 005	0 005	0.005	0.005	0 006	0.020	0 020	0 006	0 005
12513	Windsor	PM10 3665 Wyndotte St E	53	0.005	0.005	0.005	0.006	0.020	0 040	0 050	0 009	0.007
14550	Sarnia	PM10 6th Line, Moore TWP	57	0 005	0 005	0 005	0.005	0 005	0 006	0 006	0 005	0 005
14564	Sarnia	PM10 Centenial Park/ Front St	56	0 005	0 005	0.005	0 005	0 006	0 012	0 020	0 005	0 005
15525	London	PM10 900 Highbury Ave. E	59	0.005	0.005	0.005	0 005	0 020	0 040	0 040	0.009	0 007
17550	Embro	PM10 Earl Lantz property	18	0 005	0.005	0.005	0.005	0.00515	0 006	0 006	INS	INS
22304	Nanticoke	PM10 Walpole PS, Sandusk Rd	60	0 005	0.005	0.005	0.005	0 005	0 056	0 080	0 007	0 006
26365	Elmira	PM10 18 Mill St	10	0 198	0.234	0.260	0.364	0 428	0 493	0 500	INS	INS
27308	St Catharines	PM10 71 King Street	59	0.005	0.005	0.006	0.006	0 020	0 034	0 040	0 009	0.007
27352	Thorold	PM10 185 Queen St S	54	0 005	0 005	0 005	0.006	0 020	0 058	0 090	0 011	0 008
29300	Hamilton	PM10 Elgin/Kelly St	58	0 016	0.020	0.030	0.030	0.050	0 074	0 080	0.029	0.025
29302	Hamilton	PM10 467 Beach Blvd	57	0 005	0 005	0.006	0.020	0 020	0 034	0 040	0 011	0 008
29313	Hamilton	PM10 Gertrude/Depew	55	0.005	0.020	0.030	0.060	0 144	0 427	0.540	0.068	0.036
29324	Hamilton	PM10 Buchanan Park PS	56	0.005	0.006	0.020	0.020	0 030	0 049	0 060	0 015	0 011
31127	Toronto	PM10 Bay/Grosvenor St	60	0.005	0 005	0.005	0.006	0 020	0 044	0 062	0 009	0 007
35127	Etobicoke	PM10 Evans/Arnold	59	0 005	0.006	0.006	0.020	0 022	0 040	0 040	0 012	0 009
44127	Oakville	PM10 Bronte Rd/Woburn Cr	55	0 005	0 005	0.005	0.006	0 020	0 070	0 070	0 010	0 007
46127	Mississauga	PM10 Meadwood Park	59	0 006	0 020	0.030	0.040	0 040	0 064	0 070	0 028	0 023
56051	Cornwall	PM10 Memorial Pk Bedford/Third	30	0 005	0 005	0 013	0.020	0 030	0 058	0 070	INS	INS
62135	Fort Frances	PM10 Legion 250 Church	52	0.005	0.005	0.005	0.005	0.005	0 013	0.020	0.005	0.005
63201	Thunder Bay	PM10 615 James St S	60	0 005	0 005	0 005	0.005	0 006	0 028	0 040	0 006	0 006
71342	Sault Ste Marie	PM10 Bonney St	55	0.005	0.005	0.005	0.005	0.0055	0 029	0 040	0 007	0.006
71368	Sault Ste Marie	PM10 Wm Merrifield School	59	0 005	0 005	0 006	0 020	0 030	0 040	0 040	0 013	0 010
77326	Sudbury	PM10 19 Lisgar St	31	0.005	0.006	0.020	0.060	0.380	0 579	0 630	INS	INS
77570	Copper Cliff	PM10 Market St	55	0 020	0.032	0.080	0.228	0.526	2.120	3 200	0 246	0 085

TABLE 27 Iron (Fe) in PM_{10} Statistics (1998)

Unit: micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith. Mean	Geom Mean
12507	Windsor	PM10 Wright/Water St	50	0.29	0.50	0.90	1.10	1.70	2.66	3.00	0.91	0.70
12508	Windsor	PM10 467 University Ave W	46	0.20	0.30	0.50	0.65	1.15	1.67	1.80	0.56	0.44
12513	Windsor	PM10 3665 Wyndotte St E	53	0.20	0.36	0.60	1.40	3.02	9.30	12.00	1.36	0.65
14550	Sarnia	PM10 6th Line, Moore TWP	57	0.05	0.05	0.10	0.20	0.40	0.79	0.90	0.19	0.13
14564	Sarnia	PM10 Centenial Park/ Front St.	56	0.08	0.10	0.20	0.30	0.55	0.98	1.20	0.26	0.19
15525	London	PM10 900 Highbury Ave. E.	59	0.05	0.10	0.20	0.36	0.52	0.88	1.00	0.27	0.20
17550	Embro	PM10 Earl Lantz property	18	0.05	0.05	0.10	0.20	0.30	0.38	0.40	INS	INS
22304	Nanticoke	PM10 Walpole PS, Sandusk Rd	60	0.05	0.05	0.20	0.30	0.60	2.61	3.20	0.31	0.16
26365	Elmira	PM10 18 Mill St.	11	0.20	0.30	0.40	0.70	2.30	2.75	2.80	INS	INS
27308	St Catharines	PM10 71 King Street	58	0.10	0.20	0.25	0.40	0.60	0.82	1.10	0.30	0.24
27352	Thorold	PM10 185 Queen St S	54	0.20	0.39	0.50	0.80	1.47	2.95	3.80	0.73	0.52
29300	Hamilton	PM10 Elgin/Kelly St	59	0.20	0.30	0.60	0.90	2.48	4.05	4.40	0.94	0.59
29302	Hamilton	PM10 467 Beach Blvd	57	0.10	0.28	0.80	1.82	2.84	4.41	4.80	1.24	0.63
29313	Hamilton	PM10 Gertrude/Depew	54	0.66	1.49	2.10	4.43	10.64	24.82	28.00	4.59	2.63
29324	Hamilton	PM10 Buchanan Park PS	55	0.10	0.20	0.40	0.68	1.92	4.10	4.10	0.75	0.40
31127	Toronto	PM10 Bay/Grosvenor St	60	0.16	0.31	0.31	0.50	0.78	1.28	1.40	0.44	0.37
35127	Etobicoke	PM10 Evans/Arnold	59	0.20	0.40	0.50	0.60	0.82	1.20	1.20	0.51	0.44
44127	Oakville	PM10 Bronte Rd/Woburn Cr	55	0.14	0.20	0.30	0.50	0.70	1.66	2.20	0.41	0.32
46127	Mississauga	PM10 Meadwood Park	59	0.05	0.10	0.20	0.30	0.40	0.87	1.10	0.23	0.18
56051	Cornwall	PM10 Memorial Pk Bedford/Third	30	0.10	0.10	0.20	0.30	0.41	0.57	0.60	INS	INS
62135	Fort Frances	PM10 Legion 250 Church	52	0.05	0.10	0.25	0.37	0.80	1.05	1.10	0.32	0.20
63201	Thunder Bay	PM10 615 James St S	60	0.10	0.27	0.40	0.60	1.10	2.88	3.00	0.56	0.36
71342	Sault Ste Marie	PM10 Bonney St	55	0.14	0.62	1.30	3.20	7.90	18.68	23.00	3.03	1.18
71368	Sault Ste Marie	PM10 Wm Merrifield School	59	0.05	0.20	0.50	0.70	1.48	4.44	5.60	0.76	0.37
77326	Sudbury	PM10 19 Lisgar St	31	0.20	0.20	0.40	0.70	1.80	2.93	3.20	INS	INS
77570	Copper Cliff	PM10 Market St	55	0.10	0.20	0.30	0.50	1.90	5.08	5.30	0.71	0.34

TABLE 28 Manganese (Mn) in PM_{10} Statistics (1998)

Unit = micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean
12507	Windsor	PM10 Wright/Water St	50	0.008	0.016	0.027	0.035	0.046	0.070	0.074	0.028	0.022
12508	Windsor	PM10 467 University Ave W	46	0.007	0.010	0.017	0.025	0.036	0.108	0.150	0.022	0.015
12513	Windsor	PM10 3665 Wyndotte St E	53	0.004	0.011	0.030	0.067	0.184	0.500	0.640	0.070	0.025
14550	Sarnia	PM10 6th Line, Moore TWP	57	0.001	0.004	0.006	0.010	0.014	0.024	0.028	0.007	0.005
14564	Sarnia	PM10 Centenial Park/ Front St.	56	0.001	0.004	0.006	0.012	0.018	0.025	0.028	0.008	0.005
15525	London	PM10 900 Highbury Ave. E.	59	0.004	0.007	0.010	0.014	0.022	0.048	0.054	0.013	0.009
17550	Embro	PM10 Earl Lantz property	18	0.001	0.001	0.005	0.006	0.012	0.025	0.026	INS	INS
22304	Nanticoke	PM10 Walpole PS, Sandusk Rd	60	0.001	0.004	0.006	0.010	0.020	0.068	0.090	0.010	0.005
26365	Elmira	PM10 18 Mill St.	11	0.008	0.012	0.018	0.024	0.098	0.190	0.200	INS	INS
27308	St Catharines	PM10 71 King Street	59	0.006	0.010	0.012	0.019	0.028	0.056	0.064	0.015	0.011
27352	Thorold	PM10 185 Queen St S	54	0.008	0.018	0.028	0.044	0.065	0.139	0.150	0.036	0.026
29300	Hamilton	PM10 Elgin/Kelly St	59	0.012	0.019	0.032	0.072	0.154	0.480	0.550	0.073	0.038
29302	Hamilton	PM10 467 Beach Blvd	57	0.004	0.014	0.042	0.081	0.170	0.222	0.250	0.065	0.031
29313	Hamilton	PM10 Gertrude/Depew	54	0.053	0.088	0.130	0.290	0.547	1.047	1.100	0.238	0.154
29324	Hamilton	PM10 Buchanan Park PS	56	0.005	0.010	0.016	0.029	0.104	0.278	0.300	0.040	0.017
31127	Toronto	PM10 Bay/Grosvenor St	60	0.008	0.012	0.016	0.022	0.031	0.048	0.053	0.018	0.016
35127	Etobicoke	PM10 Evans/Arnold	59	0.014	0.020	0.022	0.027	0.037	0.054	0.056	0.024	0.021
44127	Oakville	PM10 Bronte Rd/Woburn Cr	55	0.006	0.010	0.018	0.028	0.063	0.148	0.180	0.028	0.016
46127	Mississauga	PM10 Meadwood Park	59	0.001	0.006	0.008	0.012	0.018	0.035	0.048	0.009	0.006
56051	Cornwall	PM10 Memorial Pk Bedford/Third	30	0.001	0.004	0.006	0.008	0.014	0.020	0.020	INS	INS
62135	Fort Frances	PM10 Legion 250 Church	52	0.001	0.004	0.006	0.009	0.018	0.036	0.038	0.008	0.004
63201	Thunder Bay	PM10 615 James St S	60	0.004	0.007	0.012	0.016	0.032	0.069	0.074	0.015	0.010
71342	Sault Ste Marie	PM10 Bonney St	55	0.010	0.056	0.098	0.212	0.324	0.572	0.610	0.150	0.072
71368	Sault Ste Marie	PM10 Wm Merrifield School	59	0.004	0.011	0.030	0.051	0.102	0.345	0.380	0.048	0.021
77326	Sudbury	PM10 19 Lisgar St	31	0.004	0.008	0.010	0.014	0.022	0.038	0.042	INS	INS
77570	Copper Cliff	PM10 Market St	55	0.001	0.004	0.004	0.008	0.024	0.051	0.054	0.009	0.004

TABLE 29 Sulphate (SO_4^{2-}) in PM_{10} Statistics (1998)

Unit =micrograms/m^3

Stn	City	Location	Number of Samples	PERCENTILES 10%	30%	50%	70%	90%	99%	Max	Arith Mean	Geom Mean
12507	Windsor	PM10 Wright/Water St	50	1.9	2.4	4.4	6.7	11.6	17.9	18.6	5.8	4.4
12508	Windsor	PM10 467 University Ave W	46	1.8	2.7	3.7	5.8	10.9	16.7	17.9	5.3	4.0
12513	Windsor	PM10 3665 Wyndotte St E	53	1.1	2.3	3.5	5.7	10.6	17.1	18.7	4.9	3.4
14550	Sarnia	PM10 6th Line, Moore TWP	56	1.4	1.9	3.3	5.0	9.2	12.0	12.8	4.2	3.2
14564	Sarnia	PM10 Centenial Park/ Front St	56	1.2	2.0	3.3	5.2	12.3	20.0	24.2	5.0	3.4
15525	London	PM10 900 Highbury Ave. E.	58	1.1	1.8	3.0	5.1	9.8	16.0	18.9	4.3	3.1
17550	Embro	PM10 Earl Lantz property	17	1.2	1.5	1.9	4.7	6.3	10.9	11.7	INS	INS
22304	Nanticoke	PM10 Walpole PS, Sandusk Rd	60	1.3	2.0	3.0	4.9	10.8	16.3	16.3	4.6	3.2
26365	Elmira	PM10 18 Mill St.	10	1.5	1.8	1.9	2.1	4.6	4.8	4.8	INS	INS
27308	St Catharines	PM10 71 King Street	59	1.2	1.8	2.8	5.1	10.3	19.1	21.8	4.6	3.2
27352	Thorold	PM10 185 Queen St S	54	1.3	2.0	2.9	5.1	12.0	18.5	20.9	4.8	3.4
29300	Hamilton	PM10 Elgin/Kelly St	59	1.2	1.9	3.0	6.3	10.8	17.9	22.5	5.0	3.5
29302	Hamilton	PM10 467 Beach Blvd	57	1.4	3.2	3.7	5.7	10.2	17.5	22.0	5.1	3.9
29313	Hamilton	PM10 Gertrude/Depew	54	1.7	2.3	3.6	6.6	11.3	19.3	24.1	5.3	4.0
29324	Hamilton	PM10 Buchanan Park PS	56	1.2	2.0	2.9	6.7	11.3	17.9	22.0	5.0	3.4
31127	Toronto	PM10 Bay/Grosvenor St	60	1.2	1.5	2.1	4.1	9.4	17.5	20.0	4.0	2.7
35127	Etobicoke	PM10 Evans/Arnold	59	1.3	1.9	2.5	3.7	9.3	18.7	21.8	4.0	2.9
44127	Oakville	PM10 Bronte Rd/Woburn Cr	55	1.0	1.6	2.2	3.4	8.5	18.8	22.2	3.9	2.7
46127	Mississauga	PM10 Meadwood Park	59	1.0	1.6	2.3	5.0	10.0	29.8	40.0	4.8	3.0
56051	Cornwall	PM10 Memorial Pk Bedford/Third	30	0.9	3.1	4.0	7.4	11.6	20.1	22.4	INS	INS
62135	Fort Frances	PM10 Legion 250 Church	52	0.5	0.9	1.4	2.0	3.6	7.5	8.3	1.9	1.4
63201	Thunder Bay	PM10 615 James St S	60	0.4	0.7	1.3	1.7	2.6	5.3	6.8	1.5	1.1
71342	Sault Ste Marie	PM10 Bonney St	55	0.5	1.2	2.0	3.0	7.1	9.6	9.7	2.9	1.9
71368	Sault Ste Marie	PM10 Wm Merrifield School	59	0.5	1.2	1.9	2.7	4.9	11.2	11.8	2.5	1.7
77326	Sudbury	PM10 19 Lisgar St	31	0.8	1.7	2.1	2.8	4.5	7.6	8.3	INS	INS
77570	Copper Cliff	PM10 Market St	55	0.50	0.90	1.80	2.58	5.58	12.89	15.10	2.55	1.64

TABLE 30 10-YEAR TREND FOR SO_2

Annual Mean (ppb)

SO_2 annual AAQC = 20 ppb

City	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
BURLINGTON	7.0	6.0	3.0	6.0	6.0	4.0	2.0	4.0	5.1	3.2
CORNWALL	7.0	5.0	5.0	5.0	7.0	12.0	5.0	5.0	3.9	5.5
ETOBICOKE	5.0	6.0	6.0	8.0	5.0	4.0	3.0	4.0	4.9	4.1
HAMILTON	10.0	7.0	7.0	7.0	6.0	5.0	8.0	9.0	5.8	6.3
KITCHENER *	3.0	n/a	3.0	3.0	3.0	3.0	2.0	3.0	3.1	3.0
LONDON #	6.0	4.0	5.0	4.0	3.0	4.0	2.0	3.0	2.5	3.2
LONG POINT	3.0	4.0	4.0	5.0	2.0	3.0	2.0	3.0	2.7	3.0
MISSISSAUGA	4.0	4.0	5.0	6.0	3.0	3.0	2.0	n/a	n/a	5.1
NORTH YORK ^	2.0	2.0	2.0	3.0	4.0	3.0	2.0	5.0	4.4	4.2
OAKVILLE	6.0	5.0	5.0	4.0	5.0	4.0	2.0	5.0	4.8	5.1
OSHAWA	6.0	4.0	4.0	4.0	3.0	2.0	2.0	5.0	4.6	4.8
OTTAWA	3.0	2.0	3.0	2.0	2.0	1.0	1.0	5.0	6.3	3.4
SARNIA	8.0	12.0	9.0	9.0	10.0	9.0	6.0	7.0	8.5	10.3
SCARBOROUGH	6.0	6.0	4.0	3.0	3.0	3.0	4.0	6.0	5.2	4.2
SIMCOE	5.0	4.0	3.0	3.0	3.0	2.0	2.0	3.0	3.2	3.8
ST CATHARINES	6.0	4.0	5.0	5.0	3.0	3.0	5.0	6.0	5.8	4.0
STOUFFVILLE	4.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	3.3	n/a
SUDBURY	8.0	8.0	5.0	4.0	4.0	3.0	4.0	5.0	3.5	5.2
THUNDER BAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
TIVERTON	2.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0	2.0	2.7
TORONTO	8.0	6.0	5.0	8.0	7.0	3.0	3.0	5.0	5.3	4.0
WINDSOR	8.0	7.0	7.0	6.0	6.0	6.0	5.0	10.0	6.7	7.4
COMPOSITE MEAN	5.1	4.5	4.1	4.3	3.9	3.6	2.9	4.5	4.2	4.2

* Site changed location from Edna/Frederick St (26029) to West Ave/Homewood (26060) in 1990

\# Site change from King/Rectory (15001) to 900 Highbury Ave (15025) in 1995

^ Site changed location from Science Centre (34002) to North York Central (34020) in 1992

n/a - data not available

TABLE 31 10-YEAR TREND FOR SP (as measured by COH)

Annual Mean (COH units/1000ft)

COH annual AAQC = 0.5 COH unit

City	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CORNWALL	0.11	0.19	0.17	0.19	0.22	0.19	0.22	0.26	0.15	0.09
ETOBICOKE	0.59	0.52	0.50	0.46	0.51	0.38	0.33	0.29	0.26	0.34
HAMILTON	0.50	0.42	0.41	0.45	0.48	0.47	0.39	0.43	0.33	0.33
LONDON *	0.33	0.28	0.25	0.24	0.25	0.25	0.20	0.21	0.17	0.18
NIAGARA FALLS	0.32	0.25	0.24	0.20	0.21	0.27	0.24	0.23	n/a	n/a
NORTH YORK #	0.41	0.30	0.33	0.31	0.35	0.40	0.38	0.37	0.28	0.29
OSHAWA	0.37	0.37	0.35	0.31	0.36	0.37	0.23	0.26	0.24	n/a
OTTAWA	0.36	0.35	0.25	0.28	0.24	0.22	0.18	0.18	0.16	0.17
SARNIA	0.30	0.28	0.24	0.22	0.20	0.20	0.18	0.17	0.18	0.19
SCARBOROUGH	0.42	0.36	0.34	0.30	0.30	0.34	0.32	0.28	0.28	n/a
SUDBURY	0.18	0.12	0.17	0.17	0.21	0.19	0.14	0.15	0.12	0.09
ST CATHARINES	0.25	0.25	0.25	0.26	0.27	0.25	0.24	0.24	0.20	0.21
TORONTO	0.37	0.38	0.40	0.39	0.42	0.38	0.38	0.44	0.35	n/a
WINDSOR	0.40	0.40	0.30	0.34	0.36	0.28	0.31	0.26	0.15	0.20
COMPOSITE MEAN	0.35	0.32	0.30	0.29	0.31	0.30	0.27	0.27	0.22	0.21

* Site changed from King/Rectory (15001) to 900 Highbury Ave (15025)

\# Site changed location from Science Centre (34002) to North York Central (34020) in 1992

n/a - data not available

TABLE 32 10-YEAR TREND FOR TRS

Annual Mean (ppb)

City	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CORNWALL	3.4	3 4	2.9	2.3	1.8	2.5	1.3	1.2	2.0	1.2
FORT FRANCES	4.9	5.5	4 3	4.2	4 2	2.4	2.5	2.7	2.6	1.4
HAMILTON	0.8	0.9	0 8	0 6	0.7	1.1	1.2	1.4	1.0	0 7
MARATHON	1.5	1.1	0 9	0.5	0.7	0.9	0.5	0 4	0.2	0.1
OAKVILLE	1.1	1.3	1.6	0.5	1.0	1.3	0.3	1.3	1.3	1 1
RED ROCK	1.4	1.7	1 4	2.0	1.9	3.2	1.1	1.2	1.6	2 8
TERRACE BAY	1.4	1.3	1.3	1.7	1.7	1.1	1.7	1 3	1.0	1 0
TIVERTON	0.4	0.0	0 0	0.1	0.1	0.1	0.2	0 3	0 1	0 2
THUNDER BAY	1.0	0 2	0 2	0 3	0 2	0.3	0.3	0 8	1.1	1.3
COMPOSITE MEAN	1.7	1.7	1.5	1.1	1.3	1.4	1.0	1.2	1.2	1.1

TABLE 33 10-YEAR TREND FOR CO

Annual Mean (ppm)

CITY	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CORNWALL	0.8	0.6	0.8	0.5	0.8	0.5	0.6	0.6	1.1	0.3
ETOBICOKE	0.7	0.8	0.8	0.6	0.7	0.7	0.8	0.7	1.0	1.0
HAMILTON	1.2	1.2	1.1	1.2	1.1	0.8	0.6	1.0	0.7	1.1
KITCHENER *	1.1	n/a	0.6	0.5	0.4	0.3	0.3	0.4	0.2	0.3
LONDON #	0.9	0.6	0.7	0.7	0.6	0.5	0.1	0.0	0.3	0.1
NORTH YORK ^	0.8	1.0	0.7	1.0	1.1	0.9	0.5	0.9	0.7	1.0
OAKVILLE	0.9	0.5	0.5	0.3	0.7	0.7	0.5	0.7	0.3	0.2
OSHAWA	0.9	0.9	0.8	0.9	0.9	1.0	0.8	0.6	0.4	1.0
OTTAWA	0.7	0.7	1.0	1.1	0.9	0.8	0.6	0.7	0.4	1.1
SARNIA	0.3	0.3	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.3
SCARBOROUGH	1.0	1.2	1.2	1.0	0.8	1.0	1.0	1.1	0.6	0.9
ST CATHARINES	1.0	0.9	1.0	0.7	0.5	0.4	0.2	0.3	0.1	0.4
SUDBURY	0.4	0.5	0.3	0.1	0.1	0.1	0.0	0.1	0.0	0.0
TORONTO	0.9	1.1	1.1	1.0	1.1	1.0	0.7	1.3	1.2	1.1
WINDSOR	1.0	1.2	1.0	0.9	0.8	1.0	0.9	0.8	0.6	0.7
COMPOSITE MEAN	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.6	0.5	0.6

* Site changed location from Edna/Frederick St (26029) to West Ave/Homewood (26060) in 1990

Site changed location from King/Rectory to 900 Highbury Ave in 1995

^ Site changed location from Science Centre (34002) to North York Central (34020) in 1992

n/a - data not available

TABLE 34 10-YEAR TREND FOR NO_2

Annual Mean (ppb)

City	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CORNWALL	9.0	8.0	6.0	10.0	8.0	9.0	8.0	12.0	8.0	n/a
ETOBICOKE	30.0	26.0	25.0	26.0	26.0	27.0	25.0	25.0	26.7	26.2
HAMILTON	26.0	22.0	22.0	19.0	22.0	22.0	19.0	22.0	18.6	22.4
KITCHENER *	25.0	n/a	13.0	15.0	14.0	14.0	11.0	13.0	13.7	16.5
LONDON #	22.0	21.0	19.0	18.0	20.0	23.0	20.0	18.0	18.0	17.7
NORTH YORK ^	28.0	28.0	29.0	24.0	21.0	20.0	18.0	22.0	20.2	23.4
OAKVILLE	16.0	17.0	17.0	16.0	19.0	17.0	17.0	20.0	20.8	17.1
OSHAWA	24.0	19.0	18.0	18.0	19.0	18.0	20.0	19.0	18.6	20.0
OTTAWA	17.0	16.0	20.0	17.0	19.0	19.0	16.0	13.0	12.5	12.4
SARNIA	19.0	21.0	19.0	20.0	16.0	18.0	17.0	16.0	16.9	18.0
SCARBOROUGH	27.0	25.0	24.0	19.0	19.0	22.0	25.0	23.0	23.4	25.5
ST CATHARINES	21.0	16.0	16.0	12.0	17.0	17.0	14.0	16.0	13.8	15.7
SUDBURY	11.0	9.0	9.0	9.0	10.0	11.0	12.0	8.0	7.4	6.0
TORONTO	27.0	25.0	29.0	27.0	29.0	30.0	30.0	34.0	31.7	27.7
WINDSOR	27.0	25.0	25.0	25.0	26.0	28.0	25.0	26.0	23.8	23.8
COMPOSITE MEAN	21.9	19.9	19.4	18.3	19.0	19.7	18.5	19.1	18.3	19.5

* Site changed location from Edna/Frederick St (26029) to West Ave/Homewood (26060) in 1990

\# Site changed location from King/Rectory to 900 Highbury Ave in 1995

^ Site changed location from Science Centre (34002) to North York Central (34020) in 1992

n/a - data not available

TABLE 35 10-YEAR TREND FOR NO

Annual Mean (ppb)

CITY	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CORNWALL	9.0	8.0	6.0	8.0	7.0	6.0	6.0	8.0	6.3	n/a
ETOBICOKE	29.0	23.0	19.0	25.0	22.0	23.0	19.0	22.0	18.6	17.9
HAMILTON	14.0	12.0	11.0	15.0	17.0	18.0	16.0	15.0	10.8	12.6
KITCHENER *	45.0	n/a	5.0	6.0	6.0	8.0	7.0	7.0	5.5	6.9
LONDON #	15.0	16.0	11.0	13.0	13.0	18.0	15.0	10.0	7.6	9.1
NORTH YORK ^	26.0	38.0	20.0	21.0	16.0	17.0	18.0	17.0	16.3	16.5
OAKVILLE	30.0	15.0	11.0	13.0	16.0	15.0	15.0	16.0	14.9	15.8
OSHAWA	18.0	20.0	14.0	14.0	17.0	19.0	18.0	15.0	16.4	15.6
OTTAWA	12.0	9.0	9.0	11.0	12.0	11.0	7.0	8.0	7.0	7.9
SARNIA	7.0	7.0	6.0	7.0	7.0	9.0	6.0	7.0	7.0	6.9
SCARBOROUGH	33.0	27.0	26.0	25.0	24.0	26.0	24.0	23.0	24.9	23.2
ST CATHARINES	11.0	11.0	8.0	14.0	12.0	10.0	10.0	13.0	10.3	16.3
SUDBURY	6.0	5.0	5.0	4.0	4.0	5.0	6.0	6.0	4.9	3.7
TORONTO	22.0	21.0	n/a	25.0	27.0	25.0	23.0	42.0	32.9	24.3
WINDSOR	15.0	16.0	19.0	18.0	17.0	17.0	15.0	16.0	15.9	16.3
COMPOSITE MEAN	19.5	16.3	12.1	14.6	14.5	15.1	13.7	15.0	13.3	13.8

* Site changed location from Edna/Frederick St (26029) to West Ave/Homewood (26060) in 1990

Site change location from King/Rectory (15001) to 900 Highbury Ave (15025) in 1995

^ Site changed location from Science Centre (34002) to North York Central (34020) in 1992

n/a - data not available

TABLE 36 10-YEAR TREND FOR NOx

Annual Mean (ppb)

City	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CORNWALL	19.0	18.0	16.0	19.0	17.0	17.0	16.0	17.0	14.5	n/a
ETOBICOKE	61.0	50.0	44.0	51.0	49.0	49.0	45.0	47.0	45.2	43.7
HAMILTON	40.0	35.0	33.0	33.0	39.0	40.0	35.0	37.0	29.5	34.7
KITCHENER*	70.0	39.0	21.0	22.0	21.0	23.0	20.0	20.0	19.2	23.9
LONDON #	37.0	34.0	31.0	34.0	35.0	38.0	32.0	28.0	24.4	25.8
NORTH YORK ^	54.0	66.0	49.0	45.0	37.0	38.0	36.0	39.0	36.7	39.9
OAKVILLE	42.0	31.0	28.0	30.0	35.0	34.0	32.0	33.0	32.8	30.0
OSHAWA	42.0	40.0	32.0	33.0	36.0	37.0	36.0	35.0	34.9	35.1
OTTAWA	29.0	25.0	29.0	28.0	29.0	28.0	22.0	25.0	19.6	22.8
SARNIA	28.0	29.0	26.0	26.0	23.0	28.0	23.0	23.0	24.9	25.1
SCARBOROUGH	60.0	51.0	50.0	46.0	46.0	50.0	49.0	45.0	47.5	48.3
ST CATHARINES	33.0	27.0	24.0	27.0	30.0	28.0	25.0	29.0	24.5	31.7
SUDBURY	16.0	14.0	14.0	14.0	16.0	17.0	17.0	14.0	12.5	9.4
TORONTO	48.0	46.0	54.0	52.0	55.0	54.0	55.0	76.0	64.3	51.6
WINDSOR	42.0	41.0	42.0	42.0	42.0	42.0	38.0	39.0	39.3	38.5
COMPOSITE MEAN	41.4	36.4	32.9	33.5	34.0	34.9	32.1	33.8	31.3	32.9

* Site changed location from Edna/Frederick St (26029) to West Ave/Homewood (26060) in 1990

\# Site change from King/Rectory (15001) to 900 Highbury Ave (15025) in 1995

^ Site changed location from Science Centre (34002) to North York Central (34020) in 1992

n/a - data not available

TABLE 37 10-YEAR TREND FOR O_3

Annual Mean (ppb)

CITY	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
CORNWALL	20.4	21.2	20.7	20.8	21.6	21.7	23.5	21.0	22.8	24.2
ETOBICOKE	16.9	16.4	19.0	15.4	16.0	17.4	16.3	17.1	19.4	20.2
GRAND BEND	28.0	27.4	n/a	29.7	31.3	30.2	31.3	31.9	31.2	31.2
HAMILTON	16.7	17.6	19.9	16.9	16.9	17.0	18.0	17.3	18.1	19.1
KITCHENER *	19.9	n/a	27.2	22.7	23.2	24.4	25.1	23.8	23.4	25.4
LONDON #	22.9	22.1	22.7	20.3	22.8	23.1	21.7	23.1	22.8	25.1
LONG POINT	35.7	33.0	33.9	32.3	31.2	32.2	31.0	34.4	35.2	32.9
MANDAUMIN	28.4	23.7	28.1	23.5	24.5	24.6	24.0	23.4	27.9	29.9
MERLIN	27.2	26.0	28.4	24.3	23.7	24.2	28.0	28.6	27.0	28.4
MISSISSAUGA	18.6	17.8	18.6	15.6	16.1	19.5	19.2	19.4	20.0	20.8
OAKVILLE	22.1	22.2	22.1	19.3	21.0	22.5	20.4	21.1	20.8	21.8
OSHAWA	21.9	18.8	22.6	20.3	21.4	23.8	22.7	21.9	23.2	23.1
OTTAWA	20.9	21.5	20.8	17.4	18.1	19.7	20.9	18.9	20.6	19.1
SARNIA	25.3	21.4	23.4	21.3	22.6	21.4	22.2	25.2	24.5	26.1
SCARBOROUGH	17.9	17.6	19.1	14.3	17.0	18.2	19.3	18.9	18.0	20.6
SIMCOE	28.6	26.3	29.1	25.1	27.8	30.2	30.7	29.9	28.6	31.1
ST CATHARINES	20.8	23.8	25.0	19.3	23.9	23.6	20.5	20.3	20.9	20.8
STOUFFVILLE	28.1	24.9	25.0	23.0	23.0	25.3	24.4	26.4	30.1	31.4
SUDBURY	28.9	27.2	27.0	25.4	25.9	27.1	29.7	28.1	28.0	29.1
TIVERTON	33.1	31.3	34.2	33.4	32.2	31.7	31.6	32.0	32.5	32.2
TORONTO	16.9	15.7	18.0	12.5	14.6	16.9	16.6	12.2	13.7	17.8
WINDSOR	20.6	17.1	17.6	15.1	17.1	18.0	18.3	20.4	20.7	21.4
COMPOSITE MEAN	23.4	21.8	24.3	21.2	23.1	23.9	23.4	23.4	24.1	25.1

* Site changed location from Edna/Frederick St (26029) to West Ave/Homewood (26060) in 1990

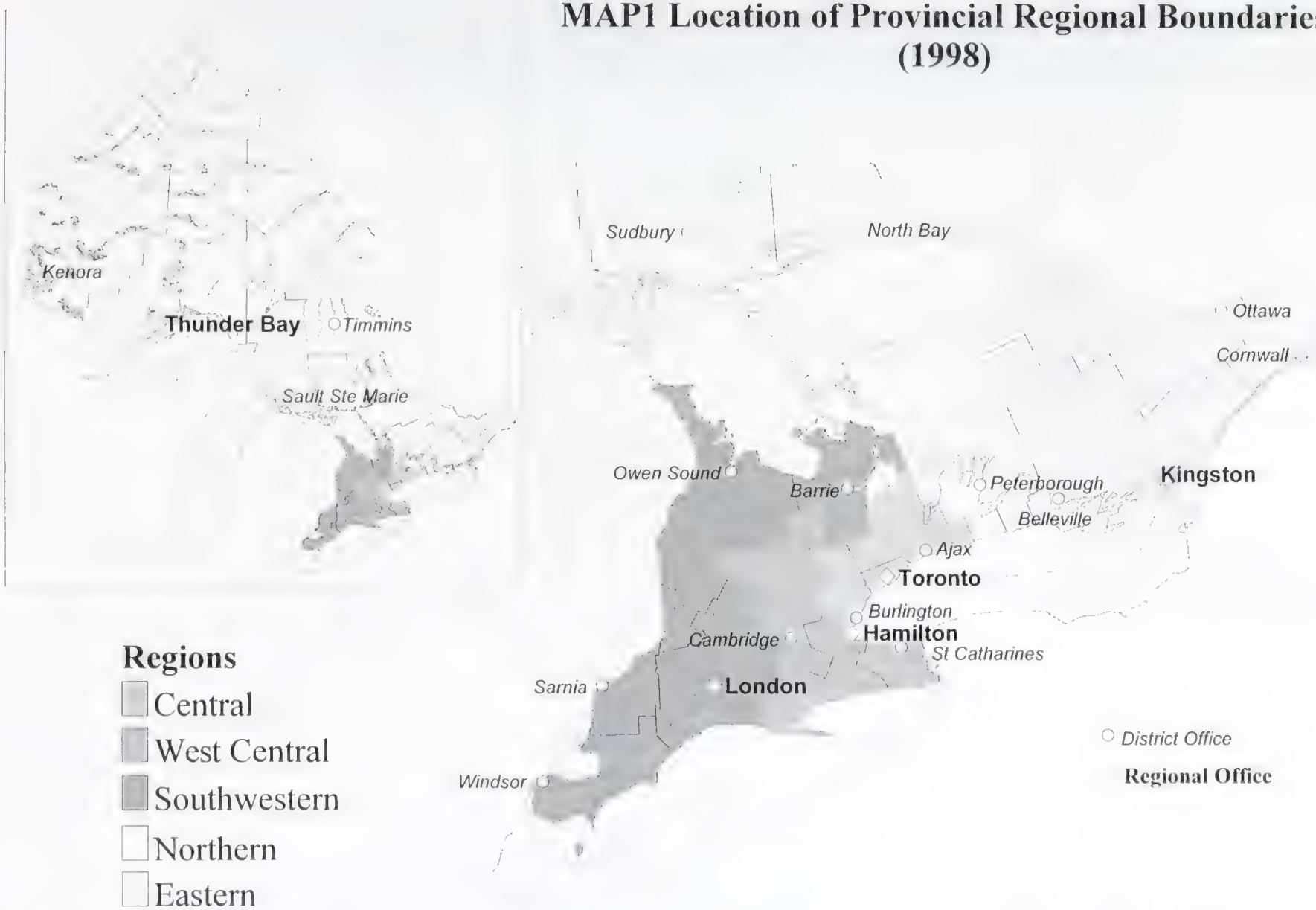
Site change from King/Rectory (15001) to 900 Highbury Ave (15025) in 1995

n/a - data not available

Table 38 Stations Used in Gaseous Trends

City	Station# (Sampling Period)
Burlington	44008 (1989 - 1998)
Cornwall	56051 (1989 - 1998)
Etobicoke	35003 (1989 - 1998)
Fort Frances	62030 (1989 - 1998)
Hamilton	29000 (1989 - 1998)
Grand Bend	10001 (1989 - 1990);15020 (1991-1998)
Kitchener	26029 (1989 - 1990);26060 (1991-1998)
London	15001 (1989 - 1995);15025 (1996 - 1998)
Long Point	22901 (1989 - 1998)
Mandaumin	14118 (1989 - 1998)
Merlin	13021 (1989 - 1998)
Mississauga	46110 (1989 - 1998)
Niagara Falls	27056 (1989 - 1992);27072 (1993-1998)
North Bay	75010 (1989 - 1998)
North York	34002 (1989 - 1991);34020 (1992-1998)
Oakville	44015 (1989 - 1998)
Oshawa	45025 (1989 - 1998)
Ottawa	51001 (1989 - 1998)
Peterborough	59006 (1989 - 1998)
Sarnia	14064 (1989 - 1998)
Scarborough	33003 (1989 - 1998)
Simcoe	22071 (1989 - 1998)
St Catharines	27067 (1989 - 1998)
Stouffville	48002 (1989 - 1998)
Sudbury	77203 (1989 - 1998)
Thunder Bay	63200 (1989 - 1998)
Tiverton	18007 (1989 - 1998)
Toronto	31104 (1989 - 1990);31103 (1991 - 1998)
Windsor	12008 (1989 - 1998)

MAP1 Location of Provincial Regional Boundaries (1998)



MAP 2 Location of Provincial Continuous SO_2 Air Monitoring Stations (1998)

MAP 3 Location of Provincial Continuous SP (as COH) Air Monitoring Stations (1998)

MAP 4 Location of Provincial Continuous TRS Air Monitoring Stations (1998)

Map 5 Location of Provincial Continuous CO Air Monitoring Stations (1998)

MAP 6 Location of Provincial Continuous NO_2 Air Monitoring Stations (1998)

MAP 7 Location of Provincial Continuous O_3 Air Monitoring Stations (1998)

MAP 8 Location of Provincial Continuous $PM_{10/2.5}$ Air Monitoring Stations (1998)

Map 9 Location of Provincial Continuous AQI Air Monitoring Stations (1998)

MAP 10 Location of Provincial 24-Hour TSP Air Monitoring Stations (1998)

MAP 11 Location of Provincial 24-Hour PM_{10} Air Monitoring Stations (1998)

MAP 12 Location of Provincial Continuous MET Air Monitoring Stations (1998)